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ABSTRACT

The effects of Title VI provisions of the Health Professions Educational Assistance Act of 1976 on patient care services in hospitals were investigated. The law restricts the supply of foreign medical grduates in the United States. Interviews were conducted with representatives of the administrative, medical, and teaching staffs of 24 hospitals to determine the law's impact on: delivery of patient care services, the particular specialties and/or services affected; and the particular population groups served by these facilities. Attention was also directed to the effects of foreign medical graduate supply constraints on hospital costs and quality of care. The implications of strategies developed in response to Title VI restrictions were also considered in terms of changes in the cost, quality, and availability of patient care services. Policies and views of public and private organizations concerned with the Title VI restrictions were identified, and federal policy options relating to implementation of Title VI were developed. Data collection was preceded by the establishment of an expert advisory panel, a literature review, preparation of discussion guides for site visits, and site selection. The findings are presented under three interrelated categories: hospital perception of the problem, actual/anticipated hospital responses, and organizational perspectives. Policy recommendations based on both no change in the law and a change in the law are presented. (SW)

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Identification of Specific Effects of Title VI Restrictions on Selected Hospitals and Implications for Health Manpower

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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Executive Summary

February 28, 1980

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Introduction

The Health Professions Educational Assistance Act of 1976, Public Law 94-484, mandated a number of changes in the policies of the Immigration and Naturalization Service relating to the issuance of exchange visitor and selected immigrant visas to foreign medical graduates (FMGs) seeking entry into the United States for graduate medical education. The growing number of FMGs entering the U.S., and the resulting dependence of many hospitals on them, led to the entry restrictions in the Title VI Provisions of P.L. 94-484.

The strict guidelines in the use of "J" visas for FMGs significantly reduce the annual level of FMG manpower entering the United States. Requirements now include:

- a commitment by the individual to return to his or her country of origin;
- an explicit statement that this return will occur after no more than two years of study (with a one year optional extension if requested by the home country);
- a statement of support from an American school of medicine (or other accredited health professions school) and an affiliated hospital;
- a statement of need by the home country for the area of specialization to be pursued by the individual;
- demonstrated competence in basic sciences, clinical sciences, and written and verbal English through the new Visa Qualifying Exam (VQE).

The goals of Title VI are fourfold:

- to limit the number of FMGs entering the United States;
- to limit exchange students to those FMGs who possess both a good command of the English language and a solid knowledge of medicine (as demonstrated on the VQE);
- to eliminate the drain of skills from other countries by forcing students to make a commitment to return to their home countries before they come to the U.S.; and

- to ensure that American medical graduates have residency positions available to them at the end of their undergraduate training.

In order to avoid abrupt disruptions of patient services, health care facilities may apply for waivers of two of the J-visa requirements. The waiver process, which expires at the end of 1980, enables the institution to apply for one additional year to seek viable alternatives to FMG manpower. If granted, the waiver would allow a more gradual application of the Title VI restrictions to the facility or affected service.

While serving appropriate long-run health manpower goals, Title VI may create a short-run period of adjustment for those institutions and areas which have developed, over time, a dependence upon FMGs for the provision of medical services. The purpose of this investigation was to identify the effects of the Title VI restrictions on the provision of patient care services in hospitals. Interviews with representatives of the administrative, medical, and teaching staffs of twenty-four hospitals generated an assessment of the law's impact on: 1) the delivery of patient care services; 2) the particular specialties and/or services affected; and 3) the particular population groups served by these facilities. Attention was also paid to the effects of FMG supply constraints on hospital costs and quality of care.

A second goal of the study was to identify the various strategies that have been developed or are being considered in response to the effects of the Title VI restrictions. Consideration was given to the implications of these strategies for changes in the cost, quality, and availability of patient care services.

A third study goal was to assemble policies and perspectives of those public and private organizations having particular interest in or concern over the Title VI restrictions. The information provided by these organizational respondents helped to create a conceptual and policy framework to better understand and interpret hospital experiences under Title VI.

The final goal of this research effort was to develop a series of federal policy options relating to the implementation of Title VI. These recommendations are made in two parts (with and without statutory alterations) and are based upon the findings from the hospital and organizational interviews.

Methods

Five related activities were undertaken to collect the data necessary to assess the effects of the Title VI restrictions. These include:

- The establishment of an expert advisory panel. The panel served three principal roles as critical reviewers, information resources, and expert observers.

- A review of all current literature related to the issue. The final report presents a profile of the role that FMGs play in the provision of hospital services.

- The preparation of discussion guides for the site visits. The highly qualitative data requirements of this analysis underscored two pressing concerns: 1) that the data collection methods be sufficiently structured to ensure uniform collection across sites; and 2) that the discussion guides remain flexible enough to gather a broad set of information. These two concerns governed the development of the study's discussion guides.

- The identification of sites and the conduct of site visits to twenty-four hospitals with varying degrees of FMG dependence. A two tier process was employed to select hospitals. The Tier One criteria were developed to identify geographic areas to be represented in the sample. They include: percent of resident FMGs in the SMSA, nationwide geographic representation, and physician shortage area designation. Tier Two criteria were used to select specific facilities. These criteria included: percent of FMG residents, facility ownership, teaching status, hospital specialty, and facility size.

- Site visits to involved organizations. Interviews were conducted with fourteen organizations based upon the recommendations of the advisory panel, the project officer, expert observers, and hospital respondents.

Sample Description

Fieldwork was conducted in a total of twenty-four hospitals in fourteen cities, covering major geographic areas of the U.S. Because of the exploratory nature of the study, hospitals were selected in a non-random fashion in an effort to oversample those facilities and areas where FMG dependence was greatest. Hospitals represented in the sample ranged in size from less than one hundred to greater than one thousand beds. Included in the sample were large urban general hospitals, community hospitals, psychiatric institutions, children's hospitals, and rehabilitation facilities. Seven hospitals were publicly owned; the remaining seventeen were privately owned. Twenty hospitals included in the sample held graduate, limited, or major medical school affiliation while four were unaffiliated. Forty-six percent of the sample hospitals were highly dependent upon FMGs (> 40 percent of staff); forty-two percent were moderately dependent (20-40 percent); and twelve percent demonstrated a low FMG dependence (<20 percent). More than sixty hospital representatives were interviewed, including administrators, chiefs of service, directors of medical education, residents, and chiefs of staff.

Findings

The findings of this study fall into three interrelated categories: hospital perception of the problem, actual/anticipated hospital responses, and organizational perspectives.

Findings: Hospital Perceptions of the Problem Resulting From Title VI Restrictions on FMGs

Perceived Severity of Title VI Effects

The majority of the hospitals in our sample (14 of 24) indicated that Title VI restrictions on the supply of foreign medical graduates would not impact severely on hospital operations. While some variation among facilities was noted, these results were relatively consistent across all dimensions of

geographic location, affiliation status, facility size, and ownership. These findings do not necessarily reflect a problem-free situation. In 21 of 24 hospitals contacted, respondents indicated that the Title VI provisions would impact upon their facility to some degree. In many of these hospitals, the effects of the legislation were expected to be modest and readily resolved through a variety of strategies. Nearly all of the hospitals in the sample supported the fundamental concepts of Title VI. The few exceptions to this support are noteworthy: they include several of the study's public general hospitals, psychiatric institutions, and small community hospitals.

Probable Duration of Impact

Hospital representatives were asked to estimate the probable duration of the Title VI effects on their facility. The data generated from this inquiry were inconclusive. The majority of those hospitals expecting short-run (less than five years) effects indicated that effective strategies were available and were sufficient to solve potential problems. Long-run problems (greater than five years) tended to be of a more generalized nature and often beyond the direct or indirect control of the affected institution.

Scope of the Title VI Effects

Eighteen of the twenty-four sample hospitals indicated that the probable effects of the Title VI restrictions would be felt on a service-specific basis. Three facilities expected hospital wide impacts and three hospitals did not anticipate any problems. In cases of service-specific effects, the services most frequently mentioned as potentially problematic were surgery, psychiatry, anesthesiology, and pediatrics. Hospital respondents indicated that "ripple effects" from affected services were also likely. For example, in those facilities where anesthesiology was likely to be affected by FMG supply constraints, service chiefs often anticipated secondary effects on the department of

surgery and in various surgical subspecialties. The exact nature and magnitude of these secondary institutional effects are not yet known.

Impact on Patient Care Services

Twenty of the twenty-four hospitals indicated that no significant disruption of patient care services would result from the Title VI restrictions. In four hospitals, modest to severe service disruptions were expected. These four hospitals primarily served well-defined racial and ethnic populations, often including large numbers of poor and elderly persons, who would receive little or no primary medical care in their area in the absence of the services provided at these facilities.

Impact on Residency Training Programs

Five of the twenty-four hospitals in our sample anticipated a reduction in the number and/or size of their residency programs as a result of the Title VI restrictions. Four of these five hospitals also projected reductions in patient care services. Those residency programs which are largely dependent on FMGs are most at risk. This is particularly true of hospitals which either have a limited or no medical school affiliation.

Definition and Causes of the Problem

Two sets of interrelated factors were identified as contributing to the problem of FMG dependence. External factors, over which individual facilities exert little or no control include: facility location, specialty maldistribution, and physician labor market considerations. Internal factors are those which hospitals can partially or completely influence, these include: the quality of residency programs, service workloads, salary and related inducements, mix of service provision and educational activities, and medical school affiliation.

The Special Case of New York City Hospitals

Three of the study's twenty-four hospitals are located in New York City, where FMGs represented 37.7 percent of the City's 8,103 medical residents in 1978. Augmenting the findings from the three hospitals were in-depth discussions with representatives of the New York City Health and Hospitals Corporation (HHC) as well as several recently published studies on FMGs in New York City hospitals.

Information obtained from these sources indicates that implementation of Title VI would pose extreme difficulties for a large number of public and private hospitals. Although virtually all New York City respondents indicated support for the concept and goals of Title VI, its impact was expected to produce possible service disruptions, changes in the availability and quality of medical services, and possible hospital closure for at least two HHC facilities.

Findings: Actual/Anticipated Hospital Responses

The hospitals included in this sample identified a series of strategies designed to minimize the impact of the Title VI restrictions on their facility. These included:

- increased use of ancillaries;
- reduction in the number of residency positions;
- upgrading and strengthening of residency programs;
- seeking of medical school affiliation status;
- use of the substantial disruption waiver process;
- reduction of services to patients;
- increases in the staff workload;
- in-house training of ancillaries and physician assistants;
- sharing of staff among institutions; and
- consolidation of departments and wards.

The development and eventual implementation of these strategies appears to be a function of a number of factors, including: the extent of the hospital's problem, the nature and urgency of other problems faced by the hospital, the cost implications of the proposed solutions, the impact on the quality of patient care, and staff acceptance of the strategy.

Given the nature of the strategies employed by hospitals, it is reasonable to expect that short-term disruptions in the delivery of certain hospital services will occur. Hospitals located in the North Central and Northeast portions of the country may face difficulties of a comparatively more severe nature than those elsewhere. However, for the majority of hospitals in this sample, FMG supply constraints constituted a problem which they could cope with.

The range of options available to highly FMG-dependent hospitals does not appear to be sufficient to completely and adequately address their problems. The transition from a hospital which is highly dependent upon FMG residents to one of modest dependence likely will require a time frame longer than that provided by Title VI.

Each of the above-mentioned strategies for moderating the Title VI impacts carries with it potential cost and quality-of-care consequences. Most of the strategies are expected to have only modest cost/quality impacts, but some may be of a greater magnitude.

Findings: Organizational Respondents

Interviews were conducted with fourteen organizations, including: the Association of American Medical Colleges, the American Board of Medical Specialties, the American Hospital Association, the American Medical Association, the Council of Medical Specialty Societies, the Educational Commission for Foreign Medical Graduates, and the Joint Commission on Accreditation of Hospitals. Discussions with the five member organizations of the Coordinating

Council on Medical Education revealed general agreement in their responses. All groups supported the philosophy and direction of the law, but expressed flexibility concerning specific details of the legislation. For the most part, all of the organizational representatives fully support the gradual reduction of the dependence upon FMGs.

Recommendations

Based upon the findings of this study, a number of policy recommendations have been formulated. These are:

Recommendations with No Change in the Law

- The HRA should provide technical assistance (informational materials and consultation) to hospitals for the purpose of identifying and implementing FMG-reduction strategies.

- A special task force should be established, comprised of representatives of the Bureau of Health Manpower, the Bureau of Health Planning, the Bureau of Health Facilities Financing, Compliance and Conversion, and the Health Care Financing Administration. This work group should direct its attention to the effects of HRA and HCFA programs upon hospital functioning and the areawide configurations of institutional health services.

- Financial incentives should be provided to physicians, to encourage them to locate in hospitals and geographic areas now dependent upon FMGs.

- There should be an expansion of the output of existing programs which train ancillary practitioners (such as physician assistants, nurse practitioners, and nurse anesthetists) who can provide some of the patient care and support activities currently performed by FMGs in residency programs.

- The HRA should conduct further research to determine the specific magnitude of the problems created for certain groups of hospitals (e.g., public general hospitals, long-term psychiatric facilities, and small community hospitals) and the strategies employed to counter the problems generated by the Title VI restrictions on FMG supply.

Recommendations with a Change in the Law

- Congress should amend Title VI to allow VQE-qualified FMGs to remain in the U.S. for an amount of time which is sufficient to complete a residency training program. Allowances should be made for one change in specialty if made by the end of the second postgraduate year.

- Congress should allow the existing substantial disruption waiver process to expire. It should develop a new and much more selective waiver process, designed to specifically address the problems of hospitals and areas which are heavily dependent on FMGs and in need of additional time to fully comply with the Title VI provisions. The new waiver process should be strictly limited to hospitals with long-standing problems. Hospitals applying for waivers should be required to demonstrate that the requested waivers are part of a viable manpower development plan which is designed to eliminate the need for continued dependence on FMGs. The waiver application extension should expire on December 31, 1983 with no further extensions permitted.

- Congress should maintain the existing exemption of visiting scholars from the provisions of Title VI. HRA should take appropriate steps to publicize this option.

Identification of Specific Effects of Title VI Restrictions on Selected Hospitals and Implications for Health Manpower

by

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This report is made pursuant to Contract #232-79-0024, Task #1. The amount charged to the Department of Health, Education and Welfare for the work resulting in this report (inclusive of the amounts so charged for any prior reports submitted under this contract) is $145,939. The names of the persons, employed or retained by the contractor, with managerial or professional responsibility for such work, or for the content of the report are as follows: Donald R. Cohodes, Alan Pardini, and Robert Hankin.

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PREFACE

This document presents the analysis and recommendations of an intensive six month study which focused upon the "Identification of Specific effects of Title VI Restrictions on Selected Hospitals and Implications for Health Manpower." The study was conducted pursuant to Contract No. HRA 232-79-0024, Task Order #1, for the Division of Medicine, HRA/DHEW.

This report could not have been produced without the contributions of a number of individuals. The work was performed under the supervision of Jeannette F. Rayner, the Government Project Officer. Ms. Rayner provided ideas throughout the project, and we are indebted to her for her thorough review and constructive criticism of every report submitted. In addition, Magdalena Miranda of the Division of Medicine provided information, suggestions, and valuable assistance throughout the life of the contract.

The Advisory Panel reviewed the products of this study at two critical junctures, and individually provided assistance and guidance throughout the project. The panel members brought a broad array of expertise and experience to the project and were most helpful in focusing the research effort. The advisory panel members included: Herbert G. Cave, M.D., F.A.C.A.; Richard M. Knapp, Ph.D.; Nancie Noie; Jackson W. Riddle, M.D., Ph.D.; and James Stockdill. We would also like to thank James Bentley, Ph.D., and Robert Walkington for filling in at the second advisory panel meeting and providing us with their review of the draft final report.

The conduct of this study included site visits and telephone interviews with representatives of twenty-four hospitals and fourteen professional organizations in twelve states. The cooperation of numerous individuals in each state was essential for the successful completion of this study. Although these individuals remain anonymous, they provided much of the information and recommendations incorporated in the final report.

The project staff for the study consisted of Donald R. Cohodes, Alan Pardini, Robert Hankin, Elizabeth Irby, Gina Brown, and Lisa Iezzoni. The project director was Donald R. Cohodes, who supervised all aspects of the study. Alan Pardini and Robert Hankin provided the necessary intellectual stimulation and support throughout the project. As major study participants, they played an important role in each stage of the study including the development of discussion guides, site selection, preparation of the literature review, site visits, and the final analysis. Mss. Irby, Brown and Iezzoni contributed to the study through their diligent efforts in conducting site visits, tracking down bibliographic references, scheduling trips, drafting portions of various reports and carefully proofing and editing all products. The project staff was ably assisted by three expert reviewers. Joel Alpert, M.D.; Craig Mellin, M.B.A.; and Alan B. Cohen, M.S. provided a critical review of various draft reports throughout the study. The final report is a better product for their efforts.

Other staff of Urban Systems Research & Engineering also played important roles in the final product. Elizabeth DeGeorge, Pam Ponce de Leon, John Laporta, and Anna Markowitz displayed unusual persistence in typing a number of drafts and a seemingly endless number of exhibits. Finally, the management of USR&E played a vital role in the project through their unwavering support for a high quality report.

Chapter 1

FOREIGN MEDICAL GRADUATES IN THE UNITED STATES

FOREIGN MEDICAL GRADUATES IN THE UNITED STATES

The passage of Public Law 94-484, the Health Professions Educational Assistance Act of 1976, established changes in the policies of the Immigration and Naturalization Service which significantly reduce the number of visas issued to foreign medical graduates (FMGs) seeking to enter the United States as exchange visitors and selected immigrants. The immigration of FMGs to the U.S. began in earnest in 1948 with the U.S. Education and Information (Smith-Mundt) Act. The Act was passed in an effort to match the educational opportunities available to Americans in foreign countries. Congress authorized the appropriation of federal funds to be used for developing a two-way educational exchange program between American and foreign universities. Those aliens who chose to study here usually did so on the mechanism provided by the Exchange Visitor ("J") visas, which allows individuals to enter the U.S. as non-immigrant visitors and remain until their studies are completed. An additional mechanism, "H" visas, allows visiting professors, scholars, and teachers to do enrichment work in this country.

The limited number of positions available in U.S. medical schools and the proliferation of approved residency programs between 1946 and 1950 caused most foreign students to receive their undergraduate medical education in their own countries and to come to the U.S. for graduate medical training. The expansion

of the number of residency programs to accommodate returning World War II veterans, together with the construction of hospitals under the Hill-Burton Act created a large number of unfilled house staff positions as the number of returning veterans dwindled and the Korean War took many of the U.S. medical graduates (USMGs). Hesitant to dissolve the training program and eliminate an alternative to fully trained physicians, hospitals began to actively recruit FMGs to fill the positions.

While Congressional hearings estimated that a maximum of 500 students would enter the U.S. under the Information and Education Act, approximately 2,100 FMGs eventually came to study as residents during 1950-51, the first year of the law's enactment. The large numbers that followed gave rise to the passage of the Immigration Act of 1952, which placed national quotas on the total number of immigrants entering the United States and limits on the number coming from each country. Because "J" visa holders frequently altered their immigration status to become full immigrants and stay beyond the length of their educational program, additional restrictions were placed on immigration. A 1956 amendment to the Smith-Mundt Act prevented "J" visa holders from becoming full immigrants without first returning to their countries of origin for at least two years. In 1959, rulings by the State Department limited FMG residency training to five years. Both of these constraints on immigration were loosely enforced however, and 3,636 waivers were granted between 1953 and 1963, allowing FMGs with exchange visitor status to become full immigrants.

The number of FMGs immigrating to practice medicine in the U.S. continued to increase after a 1965 amendment to the Immigration Act of 1952 placed physicians in a special preference category, thus making it easier for them to obtain full immigrant status. In anticipation of this increase, a committee, which included members of the American Medical Association, the American Hospital Association, the Association of

American Medical Colleges, and the Federation of State Medical Boards, was established to certify the competency of foreign medical graduates. The Educational Council for Foreign Medical Graduates (ECFMG) gave its first test in March 1958 in an effort to measure the competency of foreign-trained physicians, and to facilitate entry for those with proven medical ability. The ECFMG has acted as an organizing force, putting order to the flow of FMGs into the United States.

Over the past fifteen to twenty years, since the inception of ECFMG monitoring, the level of reliance on FMGs to fill our physician supply needs has grown to the point of becoming an issue of concern. By 1978, FMGs represented 15.4 percent of all residents in graduate medical education programs. Clarifying this reliance on FMGs is the observation that they tend to be concentrated in particular professional and geographic areas. As a result, they may actually predominate in certain specialties and regions. In terms of medical specialties, FMGs account for more than 40 percent of the manpower in anesthesiology, general practice, nuclear medicine, physical medicine and rehabilitation, and therapeutic radiology. FMGs fill more than 40 percent of the residency positions in psychiatric hospitals. In nine states, FMGs total more than 20 percent of the residents, the highest being New Jersey at 54.7 percent. These states contain nearly 70 percent of all FMG residents. Within these states, FMGs locate themselves in major metropolitan areas, much like U.S. medical school graduates.

The basis for concern about this large component of domestic physician supply is threefold. First, there is considerable variation in the quality of medical training among countries. Although FMGs are examined by the ECFMG, this is believed to establish only a minimal level of competence. The FMGs that do pass the ECFMG examination are not guaranteed to have the same level of ability as their U.S. counterparts. Adding to the problem of competence is that of language proficiency: many

FMGs practicing in the U.S. have minimal fluency in the English language and possess cultural backgrounds that are vastly different from those of their American patients. This drawback has been known to inhibit the physician/patient interaction necessary for effective diagnosis and therapy. The problem becomes particularly acute in psychiatry, a specialty in which physician/patient communication is essential for quality medical care.

Aside from the question of competence is the acknowledgement that American medical schools are now accepting more United States citizens and soon may be producing enough domestic graduates to meet our needs. Filling residency positions with foreign medical graduates decreases the number of positions available to U.S. citizens as they graduate from medical school. Accompanying this is a third concern that, while FMGs are valuable conduits for technological exchange between countries, they often do not return home to allow their country to benefit from their American education. FMGs frequently file for permanent resident status once they have studied here for a considerable length of time. From an international perspective, then, there is a "skill drain" of valuable medical talent from foreign countries into the U.S.

Title VI of the Health Professions Educational Assistance Act of 1976 (P.L. 94-484) attempts to alleviate the problem of "skill drain" while preparing for the pending graduation of large numbers of citizens from U.S. medical schools. The effect of Title VI is to greatly reduce FMG physician manpower as of 1980 by placing strict guidelines on the use of exchange visitor ("J") visas for FMG entry into the United States. New requirements include the reinstitution of a commitment by the individual to return to his or her country, and an explicit statement that this return will occur after no more than two years of study, unless specific additional training is requested for one additional year by the country from which the individual

originates. In addition to submitting a statement of support from an American medical school* and an affiliated hospital, and a statement of need for his/her specialty from his/her country, the student must demonstrate competency in medicine and proficiency in the English language through the new Visa Qualifying Examination (VQE).[1] Title VI provisions also place restrictions on FMGs entering the country on "H" visa status.

Within Title VI, there are stipulations that allow for the gradual release of American dependence upon FMG labor. Health care facilities with a major dependence upon FMG labor have until the end of 1980 to apply for waivers of the application of "J" visa regulations to their staff. This enables the institution, in effect, to "buy time" until a viable alternative to FMG labor can be found. This stipulation clearly states that, in the event the elimination of FMGs would cause a substantial disruption in services provided by a health care facility, the application of Title VI restrictions may be a more gradual process as the institution makes concrete plans for replenishing its physician supply with American labor.

The intended outcomes of Title VI restrictions are fourfold:

- to limit the number of FMGs entering the U.S.;
- to limit exchange students to those FMGs who possess both a good command of the English language and a solid knowledge of medicine (as demonstrated on the VQE);
- to eliminate the drain of skills from other countries

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[1]The VQE is a new examination required of foreign medical graduates. It is structured similarly to the National Medical Boards and must be successfully completed to obtain visa eligibility. It is comprised of approximately 950 questions of the multiple choice format and is given only in English. Approximately 500 of the questions are from the basic science disciplines and 450 are from the clinical sciences disciplines.

*Or other accredited health professions school.

into the U.S. by forcing students to make a commitment to return to their home countries before they come to the U.S.; and

- to ensure that American medical graduates have residency positions available to them at the end of their undergraduate training.

Since 1972, U.S. dependence upon FMGs has been closely monitored through federally and privately funded descriptive and analytical studies. The literature produced by these products is of three types: pre-Title VI writings, which are descriptive and statistical in nature, defining geographic and specialty locations of FMGs; literature written about the law, describing its official constraints; and post-Title VI literature, which examines the anticipated effects of the law. As part of this study, a literature review of these works was conducted to analyze Title VI of P.L. 94-484 in terms of its effects on hospitals (e.g., their staff supply, service provision, and dependence upon FMGs) and on geographic areas which are particularly dependent upon FMGs.[1]

The literature search indicated that there have been very few pre-Title VI articles or studies which directly address the issue of hospital dependence on FMGs. Although there are statistics which detail the proportions of staff and residency positions filled by foreign medical graduates, as well as data pertaining to particular specialties, these works tend to lack analytical content. Generally, the data are not disaggregated by SMSA[2], state, or urban/rural divisions. Statistics which focus on specialties do not address the question of the relative distribution of these individuals among geographic locations or practice modes. The literature reveals that there is a large proportion of FMGs in our total physician supply, that these physicians are concentrated in certain regions of the country,

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[1] Foreign Medical Graduates in Hospitals: A Review of the Literature. Compiled by Urban Systems Research & Engineering, Inc., 1979. See Appendix.

[2] Standard Metropolitan Statistical Area.

and that they tend to represent certain specialties in large proportions. These facts are supported with highly aggregated data which are, for the most part, collected by either the American Medical Association or the American Hospital Association.

Many of the analytical works focus on the effect of the legislation. The implication is that there may be considerable short-term disruptions in certain geographic and specialty areas (as a result of FMG distribution). Specific geographic areas that are expected to be affected are in the Northeast and North Central states, particularly inner-city hospitals. This is due to the relative undesirability of particular areas to USMGs and the resulting high dependence upon FMG labor. The literature also indicates that specialty areas which FMGs have tended to enter (and USMGs have traditionally avoided) will be the most heavily affected. The overriding characteristic of the literature, however, is that it is predictive in nature and does not measure what the actual effects of Title VI have been.

In the next section of this report, the results of this exploratory investigation of the actual effects of the Title VI restrictions are presented. The investigation involved site visits to hospitals where FMGs account for varying proportions of physician staff, and interviews with representatives of professional organizations whose members may be either directly or indirectly affected by the restrictions placed on foreign medical graduates. The remaining chapters detail the data obtained during interviews with hospital representatives, present an analysis of the data, and provide policy recommendations regarding changes in the Title VI restrictions.

Chapter 2

DESCRIPTIVE SUMMARY OF THE STUDY: GOALS AND METHODOLOGY

DESCRIPTIVE SUMMARY OF THE STUDY: GOALS AND METHODOLOGY

Goals of the Study

The Title VI provisions of P.L. 94-484, while serving appropriate long-run goals for our health care system, may create a short-run period of adjustment in those institutions and areas that are currently dependent upon FMGs. During this period, teaching hospitals may have to restructure their physician staffing and utilization patterns. This process may include the development of alternative staffing arrangements, the creation of new categories of allied health resources, the delegation of additional tasks to existing types of workers, a re-evaluation of the productivity and efficiency of current staffing patterns, and a number of other adjustment mechanisms. The goal of this study has been to examine, assess, and explore the problems created by the legislation and the solutions employed by institutions, and to provide recommendations regarding the options available to institutions that are heavily dependent on FMGs.

The initial objective for this study was to identify and explore the effects of Title VI on the provision of health care services in hospitals throughout the country. Information was gathered for an assessment of the law's impact on: 1) the provision of hospital services, 2) particular specialties and/or services affected within these hospitals and 3) particular population groups served by these facilities. Consideration

was given to the effects of FMG supply constraints on hospital costs and the quality of care provided.

A second goal of the study was to identify the strategies that have been or are being developed by the various hospitals in order to address the effects of the Title VI restrictions. Attention was given to the specific implications of such strategies in terms of any related changes in costs, quality of care, and continuity of health service provision.

The interviews conducted during the site visits provided information on the types of public and private organizations having interest in or concern over the implications of Title VI. An additional goal of this study was to identify and contact such organizations in order to discuss with their representatives the issues surrounding Title VI. The different perspectives of these organizations provided a conceptual framework to better understand and interpret hospital experiences with Title VI.

The final goal of this study was to develop a range of federal policy options which would address the major effects of Title VI. A synthesis and analysis of the information gathered from site visits, personal interviews, and the literature review provided the basis for the study's recommendations. These recommendations (made in two parts--with and without statutory alterations) are based upon information provided by the representatives of the twenty-four sample hospitals and upon the opinions and perspectives of the organizational respondents.

STUDY METHODOLOGY

The collection of the data necessary for an exploratory assessment of the effects of Title VI restrictions on hospitals involved five major tasks:

- the establishment of an Advisory Committee;
- a review of all current literature related to the issue;
- the preparation of discussion guides for the site visits;
- the conduct of site visits to a group of hospitals dependent on FMGs for service provision; and
- the conduct of site visits to a group of organizations and agencies which plan, coordinate, and monitor hospital-based health services and medical education activities.

Each of these tasks is described briefly in the following sections.

The Advisory Committee

Organized at the study's outset, the Advisory Committee consisted of five persons in addition to the Project Officer. All were knowledgeable in the organization, administration, and functioning of medical services institutions and graduate medical education programs. The Committee members represented the following organizations: the American Hospital Association, the American Medical Association, the National Medical Association, the Association of American Medical Colleges, and the Health Resources Administration. The list of Advisory Committee members appears as Exhibit 1.

Collectively, these individuals possess a wide range of relevant experiences. For this reason, the Committee was able to serve three major roles over the course of the study:

Exhibit 1

LIST OF ADVISORY COMMITTEE MEMBERS

1) Herbert G. Cave, M.D., F.A.C.A.
Representative: National Medical Association
Department of Anesthesiology
Harlem Hospital Center
506 Lenox Avenue
New York, New York

2) Richard M. Knapp, Ph.D.
Director
Department of Teaching Hospitals
Association of American Medical Colleges
Suite 200
One Dupont Circle, N.W.
Washington, D.C. 20036

3) Nancie Noie
Director
Division of Medical Services
American Hospital Association
840 N. Lake Shore Drive
Chicago, Illinois 60611

4) Jackson W. Riddle, M.D., Ph.D.
Director
Division of Educational Policy and Development
American Medical Association
535 North Dearborn Street
Chicago, Illinois 60610

5) James Stockdill
Acting Deputy Administrator
Office of Planning
Evaluation and Legislation
Health Resources Administration
Department of Health and Human Services
3700 East-West Highway
Hyattsville, Maryland 20782

- as an expert panel on the organization of medical services institutions and graduate medical education programs;
- as an information resource; and
- as a review panel.

Two meetings of the Committee were convened at strategic points in the project. The first meeting elicited valuable suggestions for the research design and discussion guides. The purpose of the second conference was to review the findings, conclusions, and recommendations of the study.

The Literature Search

A two-stage approach to the identification of the relevant research literature was employed. The first step involved the use of a May, 1979 NTIS bibliographic search. Relevant articles were identified and obtained from this document. Sources cited in these articles were examined for relevance and, where appropriate, included in the annotation and review activities. Secondly, project staff undertook a comprehensive review of all medical and economic index sources in order to identify: a) articles excluded from the NTIS survey, and b) literature published after the April, 1979 NTIS effective survey date. This effort yielded several additional sources, which were included in the total literature pool.

Each article was carefully abstracted and coded to correspond with one or more of the sections of the literature review. These included:

- literature pertaining specifically to P.L. 94-484;
- statistical literature;
- FMGs in particular medical specialties;
- FMGs in the mental health service delivery system;
- studies in New York State.

Project staff were able to complete a comprehensive review of Title VI related literature, examining how it relates to institutional (i.e., hospital) decision-making. A separate report, entitled Foreign Medical Graduates in Hospitals: A Review of the Literature was prepared. This summary document which analyzes and synthesizes the reviewed material, presents a profile of the role which FMGs play in the provision of hospital services. It is appended to this report.

The Discussion Guides

Two structured discussion guides were developed for use by site visit teams in interviews with hospital respondents and with major professional organization representatives. Both discussion guides were designed to ensure flexibility in the interview process while maintaining consistency in the collection of information.

The discussion guide for hospitals was divided into five general subject areas:

- general hospital information;
- labor market considerations;
- hospital policy with respect to FMGs;
- concerns over Title VI restrictions; and
- federal policy recommendations.

The hospital discussion guide was intended to minimize respondent burden, target critical information areas, and provide an opportunity for respondents to pursue ideas and opinions which pertain to the relevant issues.

The second discussion guide--for use in interviews with organizational respondents--was organized into three topic areas:

- general agency information;
- concerns over Title VI restrictions; and
- federal policy recommendations.

Within each of these areas, data, perceptions, and opinions were solicited from each interview subject. The two discussion guides appear as Exhibits 2 and 3.

The Hospital Site Visits

Hospital site selection involved a two-tiered approach. Tier One selection criteria were developed to identify specific geographic areas. Tier Two criteria were designed to select individual facilities for the sample. Although restrictions on the total size of the sample constrain the statistical validity of the findings, these criteria ensure that major categories of facilities were represented in the site visit activity.

The geographic criterion employed in Tier One was the Standard Metropolitan Statistical Area (SMSA). This base accommodates the notion that the vast majority of FMG trainees are located in large urban centers. Flexibility in the interpretation and application of the area selection criteria allowed for the inclusion of suburban facilities in the sample. The Tier One (SMSA) criteria were:

- aggregated percent of FMGs in residency training positions;
- nationwide geographic representation; and
- physician shortage area designation.

These criteria facilitated the selection of fourteen SMSAs for the fieldwork.

The second step of the site selection process was the identification of individual facilities within each target area.

Exhibit 2

FMG DISCUSSION GUIDE

Intended Interview Subjects Include:

Hospital Administrators/Directors of Medical Education/
Medical Directors/Department Heads

I. General Hospital Information*

- Could you provide us with some basic information about your institution? (Record ownership/teaching status)
  - bed size?
  - occupancy level?
  - total revenues?
  - emergency room visits?
  - payroll, etc.?
- What is your staff size?
  - Do you have a salaried full time chief of service?
  - How successful have you been in filling all of your residency slots? (Matching)
  - number of interns and residents } by specialty, % FMG?
  - number of attending physicians }
- What populations does the hospital serve?
  - by payment class, Medicare, Medicaid, BC-BS, commercials?
  - by income?
  - percent elderly?
  - ethnicity?
  - geographic service area? (number of hospitals within a 30 minute ride?)

II. Labor Market Considerations?

- How difficult has it been for the hospital to attract and retain MD staff?
  - has this changed over time?
- Are there certain services where it is more difficult to attract staff?
- How available are non-physician staff, nurses (RNs and LPNs), PAs, PEs?
- Has salary been a major deterrant in recruiting staff?
- How long do staff vacancies stay open?

*Where available, the majority of this information will be obtained from secondary sources.

Exhibit 2, continued

- How frequently do house staff see attending staff?
- What is the work load of the house staff?

III. Hospital Policy with Respect to FMGs

- Does an explicit policy exist?
  - If so, please elaborate
  - How developed?
  - Why?
  - Success of policy?
  - Do you have any recruitment brochures?
- What is the extent of your hospital's dependence upon resident/attending FMGs?
  - Gross numbers, percent of totals by service?
  - Status of FMGs: Research/Clinical/Educational?
  - Major affected department, tasks performed by FMGs?
  - Changes over time?
  - What departments are having problems? Are they related?
- Background on attending/resident FMGs
  - Country of origin; 3 most prevalent?
  - Extent of training?
  - Age/sex/ethnicity?

IV. Potential/Existing Concerns over Title VI Restrictions

Staff should begin this section of the discussion with a brief description of P.L. 94-484 and the Title VI provisions.

- Has your institution been affected by the reduction in the supply of FMGs?
  - How so?
  - What services affected most?
  - What population groups are most dependent upon these services?
  - Is the reduction a threat to continued operation?
  - Will the volume of hospital services be reduced by the cutback in FMGs?
- Has your hospital applied for a substantial disruption waiver?
  - What led you to it?
  - What is the current status?
  - Are you pleased with the process?
  - What could be done to improve it?

Exhibit 2, continued

- What has been the response of your facility?
  - How developed?
  - How implemented?
  - How successful?
  - Long-run prospects?
  - Hospital-wide or department-specific policy?
  - Has the hospital
    - substituted other MDs for the FMGs?
    - reduced services?
    - increased remaining staff productivity?
    - engaged in increased task delegation?
    - entered into shared service arrangements?
    - substituted technology for staff? etc.
  - If not, why not?

- Do you anticipate any changes in the current situation?
  - What are your longer run plans?
  - What will you do in two years?

- Where applicable: Since to date your facility has not been affected by Title VI restrictions, do you anticipate any future problems?
  - Please elaborate
  - How would you cope with them?

V. What the Government Can/Should Do?

Exhibit 3

Private Sector Discussion Guide

Intended organizations (private sector), include but are not limited to: AHA, AMA, AAMC, ECFMG, NMA, etc.

I. General information

Membership and Background Information

- total membership?
- constituency represented?
- membership qualifications/requirements?
- age of organization?

II. Concerns over Title VI Restrictions

A.) Has your organization taken a position on this issue?
- what is it?
- how developed?

B.) Anticipated or actual effects of reduction in FMG supply
- on organization/agency?
- on members?
- are the effects manageable or have significant concerns surfaced?

C.) Response of organization/agency
- how developed?
- what is the nature of the assistance to affected members?
  - accumulation and provision of relevant data and information
  - evaluation of adjustment costs and associated disruptions
- coordination of efforts?
  - between government and agency/organization
  - between various organizations/agencies
- success of efforts to date?
- long-run plans and prospects?

D.) Do you anticipate any changes in the current situation?
- short-run or long-run problem?
- changes when disruption waiver option no longer available? (end of 1980)
  - perception of reliance and/or importance of disruption waivers to date

III. Recommendations for government policy?

Facilities were selected with the guidance of a limited set of selection criteria, which encompassed major FMG hospital issues, but which did not necessarily encumber the process. The Tier Two (facility) selection criteria included:

- facility-specific proportion of FMG residents;
- facility ownership;
- teaching status;
- specialty hospitals; and
- facility size.

These criteria were used in the identification of one to three hospitals in each of the fourteen SMSAs visited.

The Professional Organization Site Visits

The organization site selection process involved the selection of public and private organizations and agencies which have responsibilities for planning hospital-based health care, evaluating graduate medical education, and monitoring cost of hospital services. Selections were made on the basis of recommendations from:

- members of the Advisory Committee;
- the Project Officer;
- the literature review; and
- expert observers in the study process.

Interviews, either telephone or on-site, were conducted with representatives of fourteen organizations.

Chapter 3

SAMPLE DESCRIPTION

Description of the Hospital Sample

A description of the facilities visited and their salient characteristics is presented in the following pages. A knowledge of the institutional and market characteristics is useful in understanding the nature of the hospital sample and the context of the analysis.

The overall objective of the site selection process, described in Chapter 2, was to identify a sample of hospitals that was broad based and which reflects a wide range of hospital characteristics. The main considerations in describing the 24 facilities are:

- geographic location;
- number of beds;
- service;
- length of stay;
- control;
- teaching status; and
- percentage of resident FMGs.

Other considerations include: religious affiliation, number of residencies, types of residencies, and types of individuals contacted within the facilities.

Geographic Location

A preliminary review of current data regarding the geographic distribution of FMGs in hospitals indicated that the vast majority of these practitioners were located in facilities in major metropolitan areas. SMSAs were identified within five regions of the country for the fieldwork activities. The regions, SMSAs, and the number of hospitals visited in each are presented in Exhibit 4.

Exhibit 4

HOSPITALS VISITED BY GEOGRAPHIC LOCATION

Region and SMSA	Number of Hospitals
NORTHEAST	8
Baltimore, MD	(2)
New York, NY	(3)
Philadelphia, PA	(2)
Providence, RI	(1)
SOUTHEAST	4
Atlanta, GA	(1)
Miami, FL	(2)
Orlando, FL	(1)
SOUTH CENTRAL	4
Houston, TX	(2)
St. Louis, MO	(2)
NORTH CENTRAL	5
Chicago, IL	(2)
Cleveland, OH	(1)
Detroit, MI	(2)
WEST	3
Los Angeles, CA	(2)
San Francisco, CA	(1)

Exhibit 5 displays the total number of hospitals visited by geographic location and other selected characteristics. Proportionately more hospitals were visited in the Northeast because of the heavy reliance on FMGs in that region.

Facility Size

Although current data indicate that there is little variation in FMG concentration among hospitals of various sizes (as measured by the number of licensed beds), the capacity of different size facilities to respond to FMG supply cuts varies. The sample included facilities of various sizes so that this phenomenon could be examined. Hospitals were grouped into five categories as follows:

- < 200 beds;
- 200-399 beds;
- 400-799 beds;
- 800-999 beds;
- $\geq$ 1000 beds.

Exhibit 6 presents a breakdown of hospitals visited by number of beds and other selected characteristics.

Service and Length of Stay

Two additional facility selection criteria, service type and length of stay, were considered in the construction of the sample of twenty-four hospitals. Four types of hospitals were visited: general hospitals, psychiatric institutions, children's hospitals, and rehabilitation institutes. A chart displaying facility service type by length of stay (short-term vs. long-term) is presented in Exhibit 7.

Facility Ownership

The hospital sample contains facilities with different types of ownership. The categories that were included are:

Exhibit 5

HOSPITALS VISITED BY GEOGRAPHIC LOCATION
AND SELECTED CHARACTERISTICS

Selected Characteristics	Geographic Location				
	Northeast (n=8)	Southeast (n=4)	South Central (n=4)	North Central (n=5)	West (n=3)
BEDS					
<200 (n=3)	0	1	2	0	0
200-399 (n=7)	2	1	0	2	2
400-799 (n=8)	4	0	2	2	0
800-999 (n=3)	2	1	0	0	0
≥1000 (n=3)	0	1	0	1	1
PRIVATE (n=17)	7	2	2	4	2
Non-profit (n=16)	(7)	(2)	(1)	(4)	(2)
For-profit (n=1)	(0)	(0)	(1)	(0)	(0)
PUBLIC (n=7)	1	2	2	1	1
City/County (n=5)	(1)	(1)	(1)	(1)	(1)
State (n=2)	(0)	(1)	(1)	(0)	(0)
AFFILIATED* (n=20)	8	2	3	4	3
Major (n=10)	(4)	(1)	(1)	(3)	(1)
Limited (n=7)	(2)	(1)	(1)	(1)	(2)
Graduate (n=3)	(2)	(0)	(1)	(0)	(0)
NON-AFFILIATED (n=4)	0	2	1	1	0
RESIDENCY PROGRAMS					
<10** (n=14)	4	3	3	2	2
10-20 (n=8)	4	0	1	2	1
>20 (n=2)	0	1	0	1	0

* See footnote on page 26 for definitions of major, limited, and graduate affiliation status.

** Includes two hospitals with no residency programs.

Exhibit 6

HOSPITALS VISITED BY FACILITY SIZE
AND SELECTED CHARACTERISTICS

Selected Characteristics	Number of Beds				
	<200 (n=3)	200-399 (n=7)	400-799 (n=8)	800-999 (n=3)	≥ 1000 (n=3)
PRIVATE (n=17)	3	5	6	2	1
Non-profit (n=16)	(2)	(5)	(6)	(2)	(1)
For-profit (n=1)	(1)	(0)	(0)	(0)	(0)
PUBLIC (n=7)	0	2	2	1	2
City/County (n=5)	(0)	(1)	(1)	(1)	(2)
State (n=2)	(0)	(1)	(1)	(0)	(0)
AFFILIATED* (n=20)	1	5	8	3	3
Major (n=10)	(0)	(2)	(4)	(1)	(3)
Limited (n=7)	(1)	(2)	(2)	(2)	(0)
Graduate (n=3)	(0)	(1)	(2)	(0)	(0)
NON-AFFILIATED (n=4)	2	2	0	0	0
RESIDENCY PROGRAMS					
<10** (n=14)	3	4	4	2	1
10-20 (n=8)	0	3	4	1	0
>20 (n=2)	0	0	0	0	2

* See footnote on page 26 for definitions of major, limited, and graduate affiliation status.

** Includes two hospitals with no residency programs.

Exhibit 7

FACILITY SERVICE TYPE BY LENGTH OF STAY

Length of Stay	Facility Service Type				Total
	General	Psychiatric	Children's	Rehabilitation	
Short-term	19	1	2	0	22
Long-term	0	1	0	1	2
TOTAL	19	2	2	1	24

- non-federal government hospitals;
- non-government, non-profit hospitals; and
- non-government, for-profit hospitals.

Exhibit 8 identifies private and public hospitals (as a percentage of the total) for both the study sample and the United States as a whole.

Teaching Status

An initial review of the literature indicated that hospital dependence on FMGs varies substantially based upon a hospital's medical school affiliation status. The sample included facilities with major, limited, graduate*, and no affiliation arrangements. Exhibit 9 indicates the number of hospitals in each category as well as the relevant percentages of the total sample.

FMG Dependence

The primary criterion used in the selection of the site visit locations was the facility-specific proportion of house staff and residents who were FMGs. Those institutions where FMGs exceeded 40 percent of the total house staff were considered to be facilities with a high level of FMG dependence. The

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*As defined in the AMA's 1978-1979 Directory of Residency Programs:

> Major affiliation signifies that the hospital is an important part of the teaching program of the medical school and is a major unit in the clinical clerkship program and will participate in any graduate medical education programs of the medical school.
>
> Limited affiliation with a medical school indicates that the hospital is used in the school's teaching program only to a limited extent. Graduate affiliation with a medical school indicates that the hospital is used by the school for graduate training programs.

Exhibit 8

PERCENTAGE OF SAMPLE AND U.S. HOSPITALS BY FACILITY OWNERSHIP[1]

Control	Study Sample	U.S. Hospitals (1976)*
PRIVATE	71% (17)	66% (4436)
Non-profit[2]	94% (16)	80% (3551)
For-profit	6% (1)	20% (885)
PUBLIC	29% (7)	34% (2266)
City/County	71% (5)	77% (1747)
State	29% (2)	23% (519)
TOTAL	100% (24)	100% (6702)

* SOURCE: U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States: 1978, 99th Edition, (Washington, D.C.: Government Printing Office, 1978), p. 109.

1 Number of hospitals is in parentheses.

2 Includes one religiously affiliated hospital.

Exhibit 9

HOSPITALS VISITED BY AFFILIATION STATUS

Affiliation Status*	Number of Hospitals	Percent of Total
Major	9	37.5%
Limited	6	25
Graduate	3	12.5
Major and limited	1	4
Limited and graduate	1	4
None	4	17
TOTAL	24	100%

* Affiliation status as defined in the AMA's 1978-1979 Directory of Residency Training Programs.

sample included 11 such hospitals. In addition, the sample included ten moderately (20 to 40 percent) and three minimally (less than 20 percent) dependent facilities. In brief, the sample was stratified in the following way:

FMG Dependence	FMG Concentration	Number of Sample Facilities
High	>40%	11 (46%)
Moderate	20-40%	10 (42%)
Low	<20%	3 (12%)
		24 (100%)

Exhibit 10 presents the number of hospitals in each category of FMG dependence by selected characteristics.

An additional indication of a facility's dependence on FMGs is whether or not a substantial disruption waiver was applied for. In the sample, seven of the 24 facilities applied for substantial disruption waivers: five were approved, one was denied, and on one, the decision is still pending.

Residencies

Exhibit 11 indicates that of the sample of 24 hospitals, 14 had less than ten residency programs (two of those hospitals had none), eight had 10 to 20 residency programs, and only two hospitals had over 20 programs. In the aggregated sample, the 24 hospitals had 29 types of residency programs.

Individuals Contacted

During each site visit, data, perceptions, policies, and opinions were solicited from the interview subjects in each of the following areas:

- general hospital information;
- labor market considerations;

Exhibit 10

FACILITY DEPENDENCE ON FMGs BY SELECTED CHARACTERISTICS

Selected Characteristics	FMG Dependence		
	Low <20% (n=3)	Moderate 20-40% (n=10)	High >40% (n=11)
AFFILIATED (n=20)	3	9	8
Major (n=10)	(2)	(6)	(2)
Limited (n=7)	(1)	(3)	(3)
Graduate (n=3)	(0)	(0)	(3)
NON-AFFILIATED (n=4)	0	1	3
NORTHEAST (n=8)	0	3	5
SOUTHEAST (n=4)	0	3	1
SOUTH CENTRAL (n=4)	1	1	2
NORTH CENTRAL (n=5)	0	2	3
WEST (n=3)	2	1	0
BEDS			
<200 (n=3)	0	2	1
200-399 (n=7)	1	3	3
400-799 (n=8)	1	2	5
800-999 (n=3)	0	1	2
≥ 1000 (n=3)	1	2	0
PRIVATE (n=17)	2	7	8
Non-profit (n=16)	(2)	(7)	(7)
For-profit (n=1)	(0)	(0)	(1)
PUBLIC (n=7)	1	3	3
City/County (n=5)	(1)	(3)	(1)
State (n=2)	(0)	(0)	(2)
RESIDENCIES			
<10* (n=14)	2	3	9
10-20 (n=8)	1	5	2
>20 (n=2)	0	2	0

* Includes two hospitals with no residency programs.

Exhibit 11

RESIDENCY PROGRAMS IN SAMPLE HOSPITALS

Residency Program*	Number of Hospitals With Program
Allergy and Immunology	4
Anesthesiology	8
Child Psychiatry	4
Colon and Rectal Surgery	2
Dermatology	5
Diagnostic Radiology	10
Family Practice	7
General Practice	1
Internal Medicine	17
Neurological Surgery	4
Neurology	7
Nuclear Medicine	1
Neuropathology	1
Obstetrics-Gynecology	15
Ophthalmology	9
Orthopedic Surgery	15
Otolaryngology	6
Pathology	12
Pediatric Allergy	2
Pediatrics	14
Pediatric Cardiology	2
Physical Medicine and Rehabilitation	3
Plastic Surgery	7
Psychiatry	9
Radiology	4
Surgery	17
Therapeutic Radiology	2
Thoracic Surgery	4
Urology	8
No Programs	2

*Residency programs are listed in the AMA's 1978-1979 Directory of Residency Training Programs.

- hospital FMG policy;
- Title VI policies and concerns; and
- federal policy recommendations.

More than sixty individuals were interviewed in the twenty-four facilities. These individuals included: Chiefs of Service, Associate Chiefs of Service, Chiefs of Staff, Residents, Directors of Nursing, Directors or Coordinators of Medical Education, Directors of Medical Affairs, and Hospital Administrators.

Chapter 4

MAJOR FINDINGS

PERCEPTIONS OF THE PROBLEMS RESULTING FROM THE TITLE VI RESTRICTIONS ON FMGs

Introduction and Methods

The problems encountered by the twenty-four sample hospitals as a result of the Title VI restrictions are presented in this section. In order to introduce an element of uniformity to these findings, an analytic framework with three dimensions has been developed. Although quite general in nature, in a descriptive sense, the framework is helpful in systematically assessing the relative levels of perceived impacts. These three dimensions are:

1) Perceived severity: The extent to which hospital representatives were able to assess the impact of Title VI on the overall operation of their facilities. Particular emphasis was placed on: the delivery of care, continuation of residency training programs, financial impact, and the like. The scale developed for this category ranged along a continuum from no impact to very severe impact. In those few cases where the perceived impact varied considerably among hospital representatives, additional information and opinions were obtained to determine the most accurate categorization of the situation.

2) Probable duration of impact: This measure (short-run/long-run) was used in order to add a temporal dimension to the perceived severity of the Title VI effects. In many cases, short-run (< 5 years) problems were perceived in far different terms than were long-run (≥ 5 years) effects due to the anticipated changes in factors, such as: the labor market for physicians and physician extenders, the availability of political, professional and fiscal resources, changes in the organization and practice of medicine, changes in the organization of hospital care services, and so forth. Although consensus on the matter of problem duration was not always apparent, extended inquiries and follow-up interviews were generally effective in developing a clearer notion of time frame.

3) Intra-facility scope of impact: This third explanatory measure was utilized in order to determine whether the anticipated Title VI effects were

expected to affect the entire facility equally or whether particular services would be more acutely affected.

Before discussing the results of the hospital site visits, it is important to reiterate several aspects of the sampling methodology to ensure that inappropriate generalizations are avoided. First, the sample of hospitals was selected using the set of criteria described in Chapter 2 of this report. This selection methodology was designed to address several objectives, the most important being the over-selection of hospitals in areas where the historical aggregated dependence on FMGs for the provision of services has been (and continues to be) relatively high. Second, within the sampling framework, an attempt was made to over-represent facilities with high proportions of FMGs in their training programs. Finally, the limited sample size inhibits the ability to generalize. The findings are thus more useful in generating hypotheses than in testing them.

This sampling methodology helps to ensure that the information collected in this research effort provides a relatively accurate representation of the most severe Title VI impacts on hospitals as well as a clear understanding of the range of strategies adopted or under consideration by institutions.

Observations - Perceived Severity of Title VI Effects

Although some variation in the perceived impact of the Title VI restrictions on hospitals was observed, the majority of the hospitals contacted (14 of 24, or roughly 58 percent) do not believe that the law poses a severe hardship in terms of overall facility functioning. This result is relatively consistent across all sample breakdowns (affiliation status, geographic location, facility size, and type of ownership). However, this should not be interpreted to mean that facilities are problem-free. With only a few exceptions (three

institutions), facility representatives indicated that the Title VI provisions would impact in some way upon their hospital. For many, however, the effects were considered minimal and readily resolved through a variety of strategies, ranging from increased recruitment to expanded use of ancillary personnel. Most of the hospitals--regardless of the degree of impact--considered the fundamental concept of Title VI to be sound and generally consistent with overall hospital policy. In those cases where the concept of limiting the availability of FMGs was not well received, these perceptions appeared to be associated with a hospital's historically high FMG dependence.

The perceived severity of the problem (58 percent not severe, 42 percent severe) can be disaggregated along several dimensions, as displayed in Exhibits 12 through 15. When the effect of hospital affiliation status is considered (Exhibit 12), it appears that the overall ratio of not severe to severe impact holds consistently across all levels of affiliation for the sample hospitals. The results suggest that the effects of organizational ties with medical schools are less critical than originally conceived, although it is possible that more dramatic effects have been masked as a result of the small number of total observations.

One question asked of all hospitals with major teaching affiliations was whether those medical school linkages in some way buffered the impacts of Title VI on their facility. In every case (ten of ten), respondents felt that this was indeed a factor.

One possible explanation for the discrepancy between prior expectations of more severe impacts on unaffiliated or limited affiliation hospitals and the study results is the fact that 18 of the 24 hospitals sampled indicated that the impact would be felt on particular services* rather than on a hospital-wide basis. Although the data reporting methodology was designed

*The number of affected services within a particular facility ranged from one to six.

Exhibit 12

PERCEIVED SEVERITY* OF TITLE VI EFFECTS BY
HOSPITAL AFFILIATION STATUS

Hospital Affiliation Status	None	Minor	Modest	Fairly Severe	Severe	Very Severe
AFFILIATED	1	6	4	5	3	1
Major	(1)	(2)	(2)	(2)	(3)	(0)
Limited	(0)	(4)	(0)	(2)	(0)	(1)
Graduate	(0)	(0)	(2)	(1)	(0)	(0)
NON-AFFILIATED	2	1	0	0	1	0
TOTAL	3	7	4	5	4	1

* Degree of severity has been disaggregated into the following categories:

None: No effects anticipated.

Minor: Effects are marginal. A sufficient pool of FMG replacements are available to accommodate FMG supply cuts.

Modest: FMG supply constraints will pose limited short-run physician shortages in some services. The facility has identified one or more strategies which are readily available and are expected to fully address the anticipated difficulties.

Fairly Severe: Substantial service-specific effects are anticipated. The range of intervention strategies may accommodate the resulting manpower shortages though hospital resources constrain the possibilities of implementing these strategies.

Severe: Substantial hospital-wide effects are expected. Intervention strategies are limited as are hospital resources. It is expected that short-run disruptions of some services may result.

Very Severe: Substantial hospital-wide effects are expected. The historically high dependence of hospitals on FMG manpower suggests that factors beyond the control of the hospital are predominating. Some long-run service disruptions and residency program closures seem inevitable.

Exhibit 13

PERCEIVED SEVERITY* OF TITLE VI EFFECTS
BY GEOGRAPHIC LOCATION

Geographic Location	None	Minor	Modest	Fairly Severe	Severe	Very Severe
Northeast	0	1	3	2	1	1
Southeast	1	3	0	0	0	0
South Central	1	1	0	1	1	0
North Central	0	0	1	2	2	0
West	1	2	0	0	0	0

* For scale, refer to Exhibit 12.

Exhibit 14

PERCEIVED SEVERITY* OF TITLE VI EFFECTS
BY FACILITY SIZE

Hospital Bed Size	None	Minor	Modest	Fairly Severe	Severe	Very Severe
<200	2	1	0	0	0	0
200-399	0	4	1	1	1	0
300-799	0	0	3	4	1	0
800-999	0	1	0	0	1	1
≥ 1000	1	1	0	0	1	0

* For scale, refer to Exhibit 12.

to distinguish the scope of effects within particular facilities, it is possible that some degree of anticipated impact was "diluted" because only a small number of the hospitals' total complement of patient care services were expected to be affected.

As noted earlier, cities from which the sample of 24 hospitals was drawn were selected in order to overrepresent those areas where FMG dependence has been traditionally high. Accordingly, 13 of the 24 facilities were located in New York, Baltimore, Providence, Chicago, Detroit, Cleveland, and Miami. With the exception of the five North Central hospitals in Illinois, Michigan, and Ohio, disaggregation of the data by region of the country yields results regarding perceived severity which are consistent with the overall findings (see Exhibit 13).

None of the seven hospitals representing the West (California) and the Southeast (Georgia, Florida) reported problems of a severe nature. South Central hospitals (in Texas, Missouri) represented mixed severity as did facilities in the Northeast (Rhode Island, New York, Pennsylvania, Maryland). The North Central region contained the highest proportion of severe problems, with 80 percent of the hospitals reporting difficulties.

Once again, these data are useful only in a descriptive sense. They provide a general picture of the range of impacts anticipated by hospitals in the sample. They do not necessarily indicate the differential geographic effects of Title VI. The results of this study in relation to perceived severity by region are consistent with prior expectations and with much of the recently published research.

In terms of the perceived severity of Title VI effects on hospital operations, the study findings suggest that modest differences do exist in the ratio of not severe to severe, but it seems likely that these effects are artifacts of the size and selection of the sample. It may be that the study data seriously underestimate the effects due to the small sample size. As Exhibit 14 indicates, the differences are relatively in-

conclusive. A partial explanation for the lack of decisive results relating to perceived problem severity (and, in fact, to all results based upon the perception of hospital representatives) is the somewhat speculative nature of the collected information. In many of the hospitals contacted, the impact of the Title VI restrictions had not been experienced yet. As a result, these data mostly represent future, rather than past or existing, events. The reliance of this exploratory investigation on these perceptions is appropriate though variations in the accuracy and comprehensiveness of respondents' expectations must be considered.

Another approach to assessing the perceived severity of the Title VI restrictions is to examine the effects by hospital control. In general terms, seventeen hospitals (71 percent of the sample) were voluntary general hospitals.* The remaining seven hospitals (29 percent of the total) were publicly owned and operated facilities (five are city/county hospitals and two are state hospitals). As presented in Exhibit 15, differences are not readily discernable among hospitals of various ownerships.

It should be noted that the two state-controlled facilities were the only psychiatric hospitals in the sample. One of these facilities anticipated the probable impact of the reduced availability of FMGs to be fairly severe. Further in-depth study is clearly indicated in order to assess more specifically the effects of the Title VI restrictions on psychiatric facilities across the country, especially in light of their historically high dependence on FMGs.

In this discussion of the perceived severity of the impact of FMG supply constraints imposed by Title VI, several observations are pertinent. First, the components of the analytic framework employed are neither mutually exclusive nor exhaustive. For example, the bed component of a hospital can be associated with hospital control and affiliation. Similarly, affiliation

*One of the facilities was a for-profit hospital.

Exhibit 15

PERCEIVED SEVERITY* OF TITLE VI EFFECTS
BY HOSPITAL OWNERSHIP

Hospital Ownership	None	Minor	Modest	Fairly Severe	Severe	Very Severe
PRIVATE	3	4	3	4	1	1
Non-profit	(2)	(4)	(3)	(4)	(1)	(1)
For-profit	(1)	(0)	(0)	(0)	(0)	(0)
PUBLIC	0	3	0	1	3	0
City/County	(0)	(2)	(0)	(0)	(3)	(0)
State	(0)	(1)	(0)	(1)	(0)	(0)

* For scale, refer to Exhibit 12.

status and location might well be linked. The findings reflected in Exhibits 12 through 15 need to be considered in light of these interactive effects.

Second, we reiterate that the results presented in the discussion of findings are purely descriptive and applicable only to the hospitals contained in the sample. Generalizations beyond this group of twenty-four hospitals should be made with great caution.

Observations - Probable Duration of Impact

In order to assess the impact of the Title VI restrictions on hospitals, information was also gathered on the probable duration of the effects. For the purpose of uniformity and conceptual clarity, the discriminator used for this category of effects was either "short-run" (less than five years from the time of the interview) or "long-run" (five years or more from the time of the interview).

The perceived duration of the Title VI impact on individual hospitals is comprised of at least two major components. The first is the actual effects of FMG supply constraints on various aspects of a hospital's operation. These include: delivery of patient care (inpatient and outpatient), conduct of residency training porgrams, fiscal integrity of the insituation, and the like. The second component of the perceived duration of impact is the ability of the hospital to cope with the actual Title VI effects. That is, the range of resources (financial, political, staff) available to the facility to accommodate the service reductions and financial effects of FMG supply constraints. It is the combined effects of these two factors that appear to produce the perception of duration.

In the selection of hospitals, emphasis was placed upon those areas and facilities which demonstrated a traditionally high dependence upon foreign medical graduates in their residency training programs. As a result of this oversampling,

one would anticipate perceptions of relatively severe Title VI effects and a high proportion of long-run problems. As Exhibit 16 indicates, approximately one half of the sample hospitals felt that the impact of FMG supply constraints posed only short-run problems (the associated degree of severity notwithstanding) while the other half anticipated long-run (five years or greater) difficulties. Four hospitals responded in the affirmative to both questions.* These data are surprising only in that, given the composition of our sample, more long-run concerns were not expressed.

An assessment of the probable duration of impact and perceived severity of effects (Exhibit 17) again yields inconclusive results. Although a modest number of short-run/severe situations are reflected (6 of 24) the nearly even distribution of short-run/not severe (8 of 24), and long-run/severe (9 of 24), indicate that either the actual Title VI effects themselves or the resources available to address these effects, or both, vary considerably across hospitals.

When stratified by geographic area, the distribution of long-run and short-run problems does not demonstrate any consistency among areas (see Exhibit 18). The findings in the two South Central states (Missouri and Texas) may reveal unanticipated effects, but are more likely artifacts of the small sample and the institutions visited there.

As Exhibit 19 indicates, the affiliation status of individual hospitals does not appear to impact significantly upon the perceived duration of effects.

When perceived duration data were analyzed by the proportion of resident FMGs (see Exhibit 20), it appeared that hospitals which have more than 40 percent FMGs anticipated larger numbers of long-run than short-run effects. For those hospitals with 40 percent or fewer FMG residents the ratio is reversed, with twice as many short-run as long-run concerns. This result

*Three hospitals anticipated no effects.

Exhibit 16

PERCEIVED DURATION OF TITLE VI EFFECTS
BY HOSPITAL OWNERSHIP*

Hospital Ownership	Short Run (<5 Years)	Long Run (≥ 5 Years)	No Effects
Public	5	5	0
Private	9	7	3
TOTAL	14	12	3

*Total exceeds 24 because of "dual effects" reported.

Exhibit 17

PERCEIVED SEVERITY* OF TITLE VI EFFECTS
BY PERCEIVED DURATION

Duration \ Severity	Minor	Modest	Fairly Severe	Severe	Very Severe
Long Run	2	1	4	4	1
Short Run	5	3	2	4	0

* For scale, refer to Exhibit 12.

Exhibit 18

PERCEIVED DURATION OF TITLE VI EFFECTS
BY REGION*

Geographic Area	Short Run	Long Run	None
Northeast	6	3	0
Southeast	2	1	1
South Central	1	3	1
North Central	3	5	0
West	2	0	1

*Total exceeds 24 because of "dual effects" reported.

Exhibit 19

PERCEIVED DURATION OF TITLE VI EFFECTS BY
HOSPITAL AFFILIATION STATUS*

Hospital Affiliation Status	Short Run	Long Run	None
AFFILIATED	13	10	1
Major	(7)	(6)	(0)
Limited	(4)	(3)	(0)
Graduate	(2)	(1)	(1)
NON-AFFILIATED	1	2	2

* Total exceeds 24 because of "dual effects" reported.

Exhibit 20

PERCEIVED DURATION OF EFFECTS
BY FACILITY WIDE PERCENT OF
FOREIGN MEDICAL GRADUATES

% Foreign Medical Graduates	Short Run	Long Run	None
<20%	2	1	1
20-40%	7	4	1
>40%	5	7	1

is intuitively appealing because it indicates that those facilities whose dependence upon FMGs is greater expect that the effects of FMG supply cuts will be longer in duration.

Of those hospitals reporting anticipated short-run concerns, the majority indicated that the problem of FMG dependence tended to be amenable to a variety of intervention strategies available to the facility. The probable solutions included the replacement of various individuals (residents) with USMGs, VQE-qualified FMGs, ancillary personnel, or some combination of these. While the magnitude (or degree of severity) of these short-run problems varied considerably, the nature of the problem tended to be consistent. The educational quality of particular residency programs was often identified as a critical component of the short-run problems which likely would be heightened by Title VI.

Long-run problems resulting from or exacerbated by the legislation tended to be more diffuse in nature and often were problems over which individual institutions had little or no control. As illustrated in the case of Hospital H, the difficulty associated with attracting USMGs to that facility's training program stemmed from the undesirability of the area in which the hospital was located. Many of the facilities reporting anticipated long-run problems cited urban decay, crime, and related factors as the principal causes of their difficulties. With only modest exceptions, the only residents these facilities were successful in attracting were FMGs. Supply cuts resulting from the law were perceived as shrinking the pool of potential FMG house officers and increasing the competition among hospitals for them. Those hospitals in the least desirable locations, already experiencing recruitment difficulties, are expected to be among the most severely affected by the law.

Exhibit 21

SCOPE OF PERCEIVED IMPACTS*

Perceived Degree of Impact Severity **	Hospital Wide	Service Specific
None Minor Modest	1	10
Fairly Severe Severe Very Severe	2	8

* No effect = 3

**For scale, refer to Exhibit 12.

A second long-run problem over which individual facilities have little or no control is the proportion of U.S. medical school graduates selecting careers in particular specialties (e.g., psychiatry, anesthesiology, pediatrics, and pathology). For example, the reduced number of USMGs selecting psychiatry as a specialty is creating service-specific shortages for many programs and facilities. A more detailed discussion of the causes of manpower problems for the sample hospitals and the effects of the Title VI restrictions in relation to these problems is presented later in this chapter.

Observations - Scope of Title VI Effects

A third factor to consider when assessing the nature and scope of the effects of Title VI on hospitals is the degree to which the expected effects are specific to a particular service(s), program(s), or to the hospital generally.

As Exhibit 21 indicates, 18 of 24 sample hospitals (75 percent) indicated that the effects of the Title VI restrictions would be felt on a service-specific basis. Three facilities (or 12.5 percent of the sample) indicated a more generalized, hospital-wide impact. Three facilities anticipated no problems. Two of the three hospitals indicating facility-wide impacts also considered the probable effects to be severe or very severe. The remaining hospital considered the problem "modest" but not readily solvable. Two of the three "hospital-wide" facilities are located in New York City, the third is in Cleveland. Discussions of the probable effects of the law with representatives of these three hospitals indicated that facility-wide effects were likely because of the generally unattractive location of the facility, which, in two of the three cases, contributed substantially to declines in the overall quality of the residency programs and led to an increased reliance upon FMGs. Tightly constrained

resources in two of the three institutions limited the range of options available dimming prospects for even partial recovery.

Although the number of services affected within each facility, as well as the expected severity and duration of the problem, varied across institutions, the services which repeatedly surfaced as particularly problematic were surgery (9 hospitals), psychiatry (6), anesthesiology (5), and pediatrics (5).

Not only are these services of individual concern to hospital representatives, but their potential "ripple effects" are also worrisome. For example, in those facilities where anesthesiology is affected, service chiefs anticipate secondary effects on the surgery department and on various surgical subspecialties (such as orthopedics and neurosurgery). The exact nature and magnitude of these secondary effects are not yet known. As a consequence, the perceived degree of severity and probable duration of the impact of the Title VI restrictions may be modestly understated for several sample hospitals that did not address these issues.

In a majority of those cases where a particular service was identified as "at risk," the representation of FMGs in that residency program was correspondingly high. In a number of cases, respondents indicated that potential results might include a substantial reduction in the number of residency positions for that service or complete elimination of the program. In many of these cases, the questionable quality of the program and the resulting patient care services had already generated concern among members of the hospital's medical staff as to the continuing operation of the program. These individuals noted that the effects of the legislation in terms of terminated or substantially reduced training programs were, in many cases, entirely consistent with hospital goals, and had provided a substantial incentive for difficult, but necessary, decisions.

The primary reasons cited for major problems in anesthesiology, psychiatry, pathology, and pediatrics were factors associated

with the lack of attractiveness of the specialty and the correspondingly small percentage of U.S. medical school graduates electing these fields of specialization.

In addition to an exploration of the nature, scope, and duration of the overall impact of the Title VI restrictions on hospital operations, this study was intended to discern information regarding the effects of the law on several more specific components of hospital functioning. During the discussions with representatives of the medical and administrative staffs of the sample hospitals, information was compiled regarding the legislation's effects in the following areas: provision of patient care services; residency training programs; and hospital costs. Where appropriate, data were obtained concerning the Title VI effects in these areas and their consequences for particular populations. As in the case with the findings regarding anticipated institutional effects and perceived duration, the findings in each of these areas are observational in nature and represent the perceptions of hospital representatives. The degree of unanimity witnessed in these findings is surprising, especially in light of the diversity of hospitals represented in this sample.

Observations - Impact on Patient Care Services

Because the primary mission of a hospital is to provide care to patients, project staff collected information from each hospital representative regarding the impact of the law on the provision of patient care services. An effort was made to discover whether the Title VI restrictions would either disrupt (in the short run) or generally reduce (in the long run) any forms of patient care currently provided by the hospital. Included in the definition of "patient care services" were: inpatient care (all services), emergency and outpatient care, and all ancillary (e.g., laboratory) services. With these very

broad criteria for the definition of patient services, it was expected that the resulting data might well overrepresent the impact of the law by casting a net too large, and, as a result, including in the range of anticipated impacts the effects of other unrelated factors, such as labor market considerations or training program quality.

Twenty of the twenty-four sample hospitals (or 83 percent) indicated that no significant disruption in patient care was expected to result from implementation of Title VI. The four remaining hospitals (or 17 percent of the sample) indicated that moderate to severe service disruptions likely would take place should the law be implemented on its current timetable and without substantive changes in the statute.

The twenty facilities which indicated no major service disruption in the short-term or the long-term can be categorized in one of two ways. The first group (of three hospitals) is comprised of facilities for which the overall impact of the law is negligible. Factors such as geographic location, program quality and/or affiliation status appear to have insulated this group from any substantial impact.

The second group (of 17 hospitals) includes those facilities that do anticipate some level of potential or probable impact from the law, but feel that the various coping strategies are sufficient to meet potential service disruptions.

The four hospitals reporting severe impact from the Title VI restrictions and anticipated service reductions were located in cities where the historical dependence on foreign medical graduates was and is high. Three of the four hospitals expected that substantial reductions in patient care, especially in surgery (a combined result of surgery-anesthesiology effects), pediatrics, and other primary care services were inevitable. Cited as major contributors to these problems were: geographic location of the hospitals; weak residency programs; limited

resources (fiscal and staff) to implement effective alternate strategies; shifts in the physician labor market; and an unavailability of appropriately-trained ancillary personnel.

Each of these four hospitals serve well-defined ethnic and racial populations who might, in the absence of the services provided by these facilities, receive little or no medical care in their areas. The populations most affected are uniformly poor, often elderly, and generally black and/or Hispanic, most of whom experience difficulty in identifying and utilizing alternate sources of care.

Though the vast majority of the hospitals in the sample reported minor or no expected impact on patient care services as a result of the legislation, the four which did anticipate major problems, for the most part, serve as "hospitals of last resort" to populations with higher than average medical care needs. A number of hospitals indicating little or no change in the level of patient care services as a result of the law did note that the organization and delivery of care might well change in a qualitative manner. Use of physician extenders (e.g., physician assistants, nurse practitioners, and nurse anesthetists) is the most apparent change in the delivery mode. Other changes of an organizational nature (e.g., consolidation of clinics, more efficient use of medical and nursing staff, etc.) might also result. Most respondents noted that qualitative changes of the type and number anticipated would be incorporated over time into the structure and routine operation of the hospital with minimal difficulty.

Observations - Impact on Residency Training Programs

Five of the sample hospitals anticipated a reduction in the number and/or size of the training programs currently in place as a direct or indirect result of Title VI. Four of these five hospitals are those which also foresee reductions in patient care services. Most severely affected by the law are unaffiliated

residency programs which are largely dependent upon FMGs. These hospitals tend to be viewed as less academically desirable, and rely heavily upon residents for a substantial level of essential patient care.

Respondents from these five hospitals indicated that the intent of Title VI appears to be consistent with concerns raised by various residency program accreditation bodies. The hospital respondents believed that the accreditation bodies make decisions based, in part, on the concentration of FMGs in a residency program. A large number of interviewed service chiefs in various specialties corroborated this finding. It appears that the various accreditation bodies hold suspect those programs which have been traditionally unable to attract U.S. medical graduates. This concern derives from a general consensus over the educational quality of mostly-FMG programs. While the accuracy and fairness of these contentions might be debated, the overlap of these policies and the Title VI effects in these five hospitals likely will result in fewer or smaller residency training programs.

It should be noted that in two of the five hospitals where residency program reductions were expected, members of the medical staff indicated that the residencies to be eliminated were academically "weak" and likely to lose their accreditation should they continue. While these individuals expressed some concern for the continued provision of medical services, their overriding interest in supporting only those programs of good quality led them to conclude that program closure was not an undesirable consequence of the law. The 19 hospitals reporting no plans for residency elimination indicated that positions would continue to be filled by USMGs or VQE-qualified FMGs.

Observations - Cost Implications

Virtually every hospital in the sample had developed contingency plans to cope with the consequences of reduced supplies of foreign medical graduates. With a single exception (increasing

the productivity of hospital staff) the consequences of these activities may tend to be cost-increasing. The magnitude of these added costs are not yet known, but several factors were identified as determinants of the overall cost effects. These included:

- number of formerly-FMG positions to be filled;
- specialties represented by these positions;
- degree to which non-MD practitioners are "substitutable";
- availability of MD and non-MD staff;
- per-day hours of coverage needed; and
- salaries of MD substitutes.

For those facilities with only modest budgetary constraints, the cost problems tended to appear manageable, although clearly of concern for the maintenance of fiscal integrity. A number of facilities (especially, although not exclusively, public hospitals), have been subject to severe fiscal constraints. The occasionally high cost of addressing the problems associated with FMG supply constraints has limited the range of options available to these institutions.

In each hospital that acknowledged some degree of Title VI impact (21 of 24), administration representatives and service chiefs indicated that, in order to maintain services at their current levels and to continue most or all training programs, overall hospital costs likely would rise. More specific cost estimates can be made only when the exact nature and magnitude of the effects and the preferred solutions are known.

In 19 of the 24 sample hospitals, administrators and/or members of the medical staff indicated that the provisions of the law were at least partially consistent with hospital manpower policies and goals. Hospitals represented in this group were both public and private, were located in every geographic

region sampled, and expected to experience short- and long-run problems with a variety of anticipated degrees of severity. In short, the majority of sample hospitals viewed the intent of the law as desirable, despite the range of possible consequences.

Several of the contacted hospital administrators indicated that, not only was Title VI generally consistent with in-house objectives for medical staffing, but the rather dramatic reductions resulting from the law have provided them with a degree of "leverage" in negotiating larger manpower resource commitments from their boards of trustees. The majority of these individuals indicated that, although some modest short-run difficulties were expected, these problems (or the expectation of these problems) had motivated hospital directors and trustees to address the complex issues related to the delivery of care in their respective institutions.

Observations - Definition and Causes of the Problem

In an attempt to discern the causes of the "problem" as indicated by hospital representatives, each person was asked to pinpoint the source(s) of the difficulty and to characterize its relationship to Title VI. The responses were rather consistent. When questioned in depth, most hospital administrators and medical service chiefs (including directors of medical education) felt that the "problem" was not Title VI per se, but the historical dependence upon foreign medical graduates to meet the service needs of these facilities. In many hospitals, Title VI was perceived as exacerbating the consequences of the FMG dependence problem in the short-run, but the law was generally expected to produce positive long-run effects. Several hospital representatives noted that, in the absence of Title VI, little voluntary FMG-reduction activity would take place, regardless of the desirability of such actions.

Several more specific factors were identified as contributing to the core problem of FMG dependence in individual hos-

pitals. These factors can be divided into two categories. The first (external factors) are those over which the individual institution has little or no control. The second (internal factors) are those which are partially or completely within the range of hospital intervention. It was frequently noted that the problem of FMG dependence is the result of interactive effects between both categories.

External Factors

1) Location of the Facility. This factor was most frequently cited as a major contributor to the dependence of a facility upon FMGs. Most respondents indicated that the desirability of the neighborhood in which the hospital is located plays a major role in the ability of the institution to attract qualified U.S. medical school graduates. Issues associated with facility location include the safety of the area, social and cultural activities, adequacy of housing, and convenience and safety of transportation. Even in those facilities with adequate fiscal resources, the issue of location appears to dominate the filling of residency positions. One hospital administrator noted that the most effective strategy for attracting a higher proportion of USMGs would be massive urban renewal.

2) Specialty Maldistribution. Even as the total number of U.S. medical school graduates increases, shifts in the choice of specialty over the past decade have contributed to distributional problems in many areas. As an example, the substantial drop in the number of first-year psychiatric residents has exacerbated manpower support problems, especailly in less desirable facilities and areas. The relatively small number of first-year anesthesiology residents also contributes to overall maldistribution problems. As the trend towards primary care and family practice continues (this emphasis is being strongly supported by DHEW policies) the distributional component of the FMG dependence problem is expected to continue despite substantial increases in USMG availability.

3) Physician Labor Market Considerations. The supply of and demand for physicians' services is such that resource-poor facilities, poorly-located hospitals, or marginal residency training programs often find it difficult or impossible to attract USMGs. The nature of physician training is such that institutions with strong research and tertiary care components, renowned instructors, and available high-technology possess a substantial competitive edge in attracting residents. Because the demand for physician labor is relatively great, the effects of increased supplies of new MDs is not expected to alter the existing situation substantially.

Internal Factors

1) Quality of the Residency Programs. The principal internal factor cited by hospital administrators and service chiefs is the overall educational quality of an institution's residency program. Because competition among hospitals for newly-graduated residents is great, a program (or set of programs) without a quality reputation or a well-known faculty is at a disadvantage. The problem of FMG dependence appears to be greatest in those programs and hospitals where emphasis is placed on service rather than education, though the distinction is often difficult to draw. These programs, already feeling the results of decreasing numbers of new residents (see #2 above) in non-prestigious hospitals, appear to be at the greatest risk in this situation.

2) Service Workload. Representatives of several hospitals with traditionally high FMG dependence indicated that excessive workloads and non-interesting cases have contributed to the problem. The provision of services to patients with relatively ordinary medical and surgical problems does not generally appeal to newly-graduated MDs. Long hours devoted to patient care necessarily limit the extent of the educational experience in these facilities. The result is an overall program or facility unattractiveness and the recruitment of FMGs as a substitute form of medical manpower.

3) Salary and Related Inducements. A number of hospital representatives noted that financial considerations are beginning to play a more substantial role in the selection of residency programs. Salary, fringe benefits, living accommodations, office space, and the like now function as direct inducements for new MDs to consider particular positions. For resource-rich hospitals, this situation only poses modest difficulties. For resource-poor hospitals with constrained budgets, the problem may be insurmountable.

4) Medical School Affiliation. Closely tied with program quality, the affiliation status of a hospital and its various training programs is a critical factor affecting the ability of the institution to attract U.S. medical school graduates. According to a number of respondents, affiliation with a medical school acts in two ways to attract USMGs. First, the perceived quality and credibility of the program is enhanced by the affiliation. Second, with medical students rotating through affiliated hospitals during their clinical clerkships, the likelihood of their choosing familiar programs for residencies could result in larger numbers of USMG applicants to these programs.

These factors, then, were reported by hospital representatives as primary contributors to the FMG dependence problem.

SPECIAL CASES - NEW YORK CITY HOSPITALS

The range of anticipated Title VI effects on hospitals discussed in this chapter are derived from the perceptions of all twenty-four sample facilities. During the course of the field work, the New York City area was frequently identified as being particularly hard hit. Historically, New York City has maintained a substantial dependence on foreign medical graduates to staff residency positions in public and private hospitals. At present, the dependence is approximately 38 percent city-wide, although particular areas and boroughs demonstrate significantly higher FMG ratios.

Only three of the 24 sample hospitals selected were in New York City. However, available published material as well as in-depth discussions with several representatives of the New York City Health and Hospitals Corporation (HHC), the City's public hospital organization, have provided a great deal of depth to the original findings. It is not the intent of this brief discussion to describe in complete detail the FMG situation in New York, nor to attempt to identify the complex nature or the multiple causes of the problems. The reader is referred to several studies in this area[1,2,3] for an in-depth assessment of the New York situation.

It is possible, though, to provide a brief sketch of the problem as identified by representatives of the three hospitals

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[1] New York City Health and Hospitals Corporation, Foreign Medical Graduates Study, 1979, unpublished.

[2] Barhydt, Nancy, Strategies for Reduced Number of Foreign Medical Graduates in New York City Hospitals, Doctoral Dissertation; Columbia University School of Public Health, May 1979.

[3] Levin, Irving J. and Mazze, Roger, Foreign Medical Graduates in Graduate Medical Education Programs in New York City Hospitals, New York State Health Planning Commission, May 1979.

and by the HHC respondents. In 1978, FMGs represented 37.7 percent of New York City's 8,103 medical residents. This percentage is substantial and among the highest of all large U.S. cities. According to the New York State Health Planning Commission (NYHPC), 3,056 foreign medical graduates (immigrants and students) held residency positions in New York City hospitals in 1978. Although this represents a drop of four percent from 1977 (3,039 of 7,282), the dependence upon FMGs is still substantial.

This overall percentage of FMGs varies considerably among the City's five boroughs. As Exhibit 22 indicates, the differences range from a 23 percent concentration in Manhattan to 62 percent in Brooklyn. This substantial variation in the concentration of FMGs is partially explained by factors such as: the location of medical schools and major teaching hospitals (five of New York City's seven medical schools are located in Manhattan); availability of housing and transportation; proximity to social and cultural activities, and the like. Even within boroughs, the representation of FMGs in particular hospitals demonstrates considerable variation.

Based upon discussions with three New York City hospitals (two private, one HHC) and upon information provided by HHC representatives, it appears that implementation of Title VI would pose extreme difficulties for a large number of private and public institutions. Although virtually all New York respondents indicated support for the concept of the law, its impact was expected to result in severe service disruptions, precipitous drops in the availability of quality health care, and possible hospital closures for at least two HHC facilities.

These rather dire projections of the impact of the Title VI effects are made even more disturbing when one examines the particular populations most at risk from hospital closings and service reductions. In most cases, these populations are those with few available resources and those least able to adjust to a drastic change in their only source of medical care. In many

Exhibit 22

PROPORTION OF FMGs IN RESIDENCY
TRAINING POSITIONS IN NEW YORK CITY
BY BOROUGH, 1978

Borough	Number	% of Borough Total
Bronx	376	31.7%
Brooklyn	1437	62.9
Manhattan	885	23.1
Queens	274	45.1
Staten Island	84	44.4
New York City Total	3056	37.7

SOURCE: New York City Health and Hospitals Corporation, Foreign Medical Graduates Study, 1979.

cases, the most severely affected population groups are those with the greatest need and those for whom the public or private hospital provides the "medical care of last resort."

The causes of the FMG dependence problem are numerous and rooted in decades-old, large-city difficulties. They are qualitatively similar to the external causes identified earlier in the chapter, though an order of magnitude more severe. They include: the location of some facilities and corresponding problems with safety, housing, or transportation; substantial competition among the City's 50-plus hospitals for medical residents; the severely limited resources (especially HHC facilities) available to hospitals to expand and upgrade services, programs, and plants; and the ambiguous quality of many teaching programs.

The magnitude of the numbers involved, the historical nature of the FMG dependence, limited resources, and multiple sources of causality preclude simple, short-term answers to the problem. While many New York City hospitals have taken initial steps to address the dependence problem, these measures are at best the first in a series of strategies which may commence to ameliorate the problem in the long run.

This very brief treatment of the particularly acute situation in New York City does not convey the full extent of the problem presently being addressed or those expected as a result of Title VI. The reader is again referred to the above-noted sources for a more comprehensive discussion of various aspects of the problem.

ACTUAL/ANTICIPATED HOSPITAL RESPONSES

Strategies

The strategies which hospitals employ to adjust to the reduction of available FMGs are a function of several factors: the extent of the hospital's problem, the nature of other problems faced by the hospital, the cost implications of proposed solutions, the impact on the quality of patient care, and staff acceptance of the strategy. Institutions generally pursue a number of strategies simultaneously. These strategies include:

- increased use of ancillaries;
- reduction of the number of residency programs;
- upgrading and stengthening of residency programs;
- seeking medical school affiliation status;
- increased recruitment efforts for residents and attending staff;
- use of the substantial disruption waiver process;
- reduction of services to patients;
- increased staff workload;
- in-house training of ancillaries and physician assistants;
- sharing staff among institutions; and
- consolidation of departments and wards.

Exhibit 23 provides a breakdown of strategies by hospital bed size. The most favored hospital strategies, particularly in hospitals with more than 400 beds, were an increase in the recruitment of residents and the hiring of physician assistants or ancillary personnel. Only a few institutions thought that a reduction in FMGs would result in a disruption of services. These same institutions were also pursuing other strategies which they hoped would preclude such a disruption. The majority

Exhibit 23

MOST FREQUENTLY MENTIONED HOSPITAL STRATEGIES BY BED SIZE

Hospital Bed Size	Hospital Strategies							
	None	Increased Recruitment of Residents	Hiring More MDs for Staff	Reduction of Service	In-house Training of PAs and Ancillaries	Hiring of PAs and Ancillaries	Upgrading Residency Training Programs	Other* (Increased workload, apply for waiver, lower hiring standards, etc.)
<200 (n=3)	0	1	1	0	0	0	0	2
200-399 (n=7)	1	3	1	2	1	3	1	5
400-799 (n=8)	0	7	3	2	2	7	1	2
800-999 (n=3)	0	2	0	1	1	2	1	2
≥ 1000 (n=3)	0	2	2	1	1	2	0	2
TOTAL	1	15	7	6	5	14	3	13

*None of these strategies were mentioned more than twice. The other category includes: construction of a new facility, hiring older MDs, hiring moonlighting residents, lowering hiring standards, increasing staff workloads, applying for a substantial disruption waiver, sharing staff with other institutions, rotating residents across hospitals, raising staff salaries, and curing urban blight.

of the strategies employed by the site-visited institutions were short-term and stopgap in nature, largely because most of the hospitals faced only modest problems, and perceived them to be short-lived. There were exceptions: hospitals which were experiencing more severe problems were also pursuing a greater number and a wider mix of strategic responses. These responses were both long-term and short-term.

Exhibit 24 provides a list of the sample hospitals, the magnitude of their problem, and the strategies employed to resolve their difficulties. In conjunction with Exhibit 23, Exhibit 24 provides an institutional profile of the responses to the Title VI provisions of P.L. 94-484. While the range of responses has been broad, the focus of the strategies has been decidedly short-term. Discussions with representatives of the 24 hospitals in the sample made it clear that strategic responses to problems are not pursued until the problem nears crisis proportions. In most of the hospitals sampled, there were other problems that were perceived as more severe than the FMG issue. When a broad question was posed regarding personnel concerns, the general response was: "My big problem is finding nurses." Faced with a multitude of day-to-day difficulties, the typical hospital administrator in this sample found it difficult to be concerned with a problem that was not overwhelming. Long-term planning, such as upgrading residency training programs through affiliation with a medical school, was more a consequence of the staff's desire to improve the overall quality of a training program than a response to the reduced pool of available FMG residents.

The short-term strategies embraced by most hospitals (e.g., increased recruitment of residents, hiring of physician assistants and ancillaries, increasing the staff's workload, etc.) will buy them some time. But, if the FMG supply problem persists, as it is expected to, then at some point in the future these strategies will no longer be functional. For example, increasing

Exhibit 24

HOSPITAL POLICY AND STRATEGY BY PROBLEM SEVERITY

Hospital	FMG Concentration (%)	Severity of Problem (SS or HW)[1]	Hospital Policy (P) and Strategies (S)[2]
A	35	none	P: none S: none
B	100	modest (SS)	P: no formal planning - there is a hospital committee S: recruitment of USMGs for FP; hiring more staff MDs; service reduction in long-run; hiring PAs and RNs.
C	20	modest (SS)	P: hospital wide policy to reduce number of FMGs on staff (precedes law) S: recruitment; hiring of PTH assistants.
D	85	fairly severe (SS)	P: encourage FMGs with immigrant status to come S: hire professionals; use ancillary personnel; increase MD workload; increase salaries.
E	60	fairly severe (SS)	P: deliberate lowering of hiring standards, all MDs need is license to practice S: recruitment
F	10	severe (SS)	P: try to get anyone they can for PD S: recruitment; possible service reduction (PD); use of NPs and PAs
G	37.5	minor (SS)	P: none S: select next best USMGs
H	30	minor (SS)	P: commitment to maintaining level of service S: recruitment; hiring of part-time psychiatrists and dermatologists; hiring of NAs
I	92	very severe (HW)	P: none S: ancillary personnel in PTH; apply for substantial disruption waivers
J	37	minor (SS)	P: none S: recruitment; in-house training of PTH assistants; upgrade teaching; hire PTH assistants.

Exhibit 24

(continued)

Hospital	FMG Concentration (%)	Severity of Problem	Hospital Policy (P) and Strategies (S)
K	38	minor (SS)	P: none S: recruitment; commitment to upgrading quality of program
L	80	modest (HW)	P: hospital wide policy of preference to USFMGs and USMGs (implemented before FMG problem arose) S: improve quality of teaching program; recruitment
M	2	minor (SS)	P: none S: select next best USMGs
N	100	severe (HW)	P: to resist the law; have formed effort to organize community hospitals (as a result of the problem) S: service reduction (ER); indirect (and illegal) use of PAs; moonlighting residents
O	22	fairly severe (SS)	P: service specific (e.g., PD feels commitment to train some FMGs, AN considering many alternatives S: recruitment; in-house training (NAs); hire NAs; hire older MDs
P	45	severe (SS)	P: service specific (each service does own recruiting, education, etc.) S: recruitment; service reduction in GS and AN; in-house training (ER resident program); ancillary personnel; increased affiliations; possibility of shutting down P and R residencies; temporarily discontinue AN residency
Q	77	minor (SS)	P: none S: none
R	40	minor (SS)	P: none S: recruitment
S	54	modest (SS)	P: hospital wide commitment to achieving all USMG staff S: recruitment; hiring MDs; ancillary personnel; develop more personal contact with medical schools

Exhibit 24

(continued)

Hospital	FMG Concentration (%)	Severity of Problem	Hospital Policy (P) and Strategies (S)
T	38	fairly severe (HW)	P: preference to USMGs S: recruitment; hiring MDs; possible service reduction; hiring NPs; sharing of wards (redistribution of patients)
U	9	none	P: none S: select next best USMGs
V	40	severe (SS)	P: hospital wide policy of reducing number of FMGs and increasing attractiveness of program to USMGs S: recruitment; hiring MDs (AN); service reduction (elective surgery); in-house training (NPs, PAs, NAs); hiring NPs, PAs, NAs; affiliations with medical schools increased
W	50	none	P: recruit MDs as needed (USMGs) S: recruitment; construction of new building
X	63	fairly severe (SS)	P: hospital wide policy of not taking FMGs (due to threat of loss of accreditation) S: recruitment; ancillary personnel; in-house training (PA-surgical assistants, midwives)

[1] SS = service specific
HW = hospital wide

[2] Key to abbreviations:

AN = anesthesiology
ER = emergency room
FP = family practice
GS = surgery
MD = physician
NP = nurse practitioner
P = psychiatry
PA = physician assistant
PD = pediatrics
PTH = pathology
R = radiology
RN = registered nurse
USFMG = American Graduate of a Foreign Medical School
USMG = United States Medical Graduate

the workload of existing staff has finite limitations. Patient care will begin to suffer and existing staff may become disgruntled as work conditions deteriorate. The hiring of non-physicians such as physician assistants (PAs), and nurse practitioners (NPs), as substitutes for physicians also has a rapidly-reached limit. Non-physicians cannot assume all of the responsibilities of a physician. Moreover, physician acceptance of PAs and NPs is not widespread. Licensing laws and malpractice concerns further complicate matters. Finally, because residents generally work long hours, receive a modest salary and provide a great deal of service, it is not possible to make a simple substitution of one PA or one NP for each resident. The administrators in the study sample expressed the belief that it would take at least two and possibly three PAs or NPs to replace each resident, and that even then not all of the physician's activities would be accounted for. The cost implications of this type of substitution were also pointed out as being potentially prohibitive.

In a number of institutions, a strategy of training existing physician assistants and ancillaries was pursued. Again, the returns from such a tactic are potentially small and only useful for a short duration. The increased skill package of a newly trained PA will enable that individual to perform some, but not all, of the functions of a missing resident. If the staff problem is very modest and not expected to become worse, a strategy such as this will be of some help, but it does not appear to be the answer. Furthermore, as with the hiring of PAs and NPs, this option is not costless.

While the number of graduates of U.S. medical schools has grown significantly, the demand for residents has not appreciably diminished. The demand for residents still outstrips the supply. As the number of FMGs entering the U.S. for graduate training diminishes, this disequilibrium will become greater. Competition for U.S. medical school graduates can be expected to grow. Increased recruitment by the hospitals is unlikely to solve their

staffing needs. An unattractive hospital with a poor work environment and little promise of close professional supervision will continue to have difficulties in atrracting residents, regardless of the intensity of the recruitment efforts. U.S. physicians will not willingly seek training positions in the less desirable hospitals in the country. A more promising strategy pursued by some hospitals in conjunction with their increased recruitment activities is the upgrading of residency training programs through the acquisition of affiliation status with a medical school. This strategy directs itself to the problem faced by the hospital, namely, the quality of its training program. The premise of this strategy is that, if the quality of the training program is upgraded, more U.S. medical school graduates will be willing to enter the program. Within the sample of hospitals visited, this strategy appears to have paid dividends.

As would be expected, the most serious response to the reduction in the supply of FMGs has been raised by those hospitals or services within hospitals that have been most dependent upon FMGs. These institutions are proposing or anticipating a reduction in the provision of patient services. Six of the 24 hospitals in the sample expressed this concern. In general, the response of reducing services was limited to a specific service. In one facility, pediatrics was affected; in another elective surgery; and in a third, it was emergency room services. Moreover, in most of the hospitals considering service reduction as a strategy there may have been factors other than the unavailability of FMGs leading to this decision. Three of the six hospitals considering service reductions were operated by units of government; the other three were smaller community hospitals without affiliated residency programs. The government hospitals faced a series of problems ranging from an aged physical plant, poor cash flow, and limited budgets to urban blight. The FMG availability problem was simply one more

difficulty and, in some instances, may even have been used as a scapegoat for other more serious concerns. Solving the FMG availability issue will still leave these facilities with numerous other difficulties. A more basic question which must be raised is whether these hospitals are performing a legitimate function or if perhaps other institutions may be better suited to deliver services to the community.

As with the situation facing a number of urban government-owned facilities, the smaller community hospitals included in this study faced a number of difficulties in addition to the FMG concern. These difficulties include the need for a new physical plant, low occupancy levels, few ties with medical schools, deteriorating cash flow positions, and accreditation and licensing problems. For these institutions, the unavailability of FMGs as a source of inexpensive labor was an additional burden. Some of the individuals expressed concern that their hospital was being discriminated against because it was not a major teaching or referral center. The merits of this position are debatable. Nonetheless, these hospitals are experiencing difficulties and they anticipate a disruption in the provision of services. Some of the strategies employed to prevent these disruptions are stopgap measures, not likely to yield benefits in the long-run. The tactics include: more intensive recruitment of U.S. medical school graduates, hiring more physicians for the staff, hiring PAs and NPs, the use of "moonlighting" residents, and increasing the workload of existing staff.

Exhibit 25 provides some additional information on hospital strategies by salient hospital characteristics. Both public and privately owned hospitals utilized the full range of strategic tactics to offset any manpower shortages. The hospitals with major affiliations pursued a wider range of options than those with limited or graduate affiliations. Finally, hospitals located in the Northeast and North Central portions of the country pursued a much wider set of strategies than the other hospitals

in the study (although this is likely a function of the relative intensity of the FMG problem by geographic location).

Cost and Quality Implications

Each of the hospital-employed strategies for offsetting the reduction in the available supply of FMGs has cost and quality of care implications. Many of the strategies likely will have a marginal impact on both cost and quality of care, but some have more serious implications. Exhibit 26 depicts the potential set of hospital strategies and the anticipated cost and quality of care implications of pursuing each course of action. The four strategies which have the potential to be most costly are: the hiring of PAs, NPs, and ancillaries, hiring more attending staff, raising staff salaries, and upgrading residency training programs.

Among the hospitals visited, hiring physician assistants and nurse practitioners was the second most favored strategy, even though this option may be the most costly. At numerous hospitals, administrators, chiefs of service, and directors of medical education indicated that it would take two to three PAs or NPs to simply provide the same in-hospital time commitment as a resident. In addition, the salaries of the PAs or NPs generally would be at least equal to, and in all likelihood greater than, a resident's salary. Compounded by the potential of unionization of these employees, the option of hiring PAs and NPs as substitutes for residents appears to be potentially costly. The irony of this option is that even with a full complement of PAs and NPs, it is extremely unlikely that the same mix of services would be provided to patients. Physician reluctance to use PAs and NPs, malpractice concerns, and state licensure laws all preclude the use of PAs and NPs as substitutes for residents.

The strategy of hiring more attending staff is also a potentially costly option. It is predicted upon the premise

Exhibit 25

MOST FREQUENTLY MENTIONED STRATEGIES BY OWNERSHIP, AFFILIATION, AND GEOGRAPHIC LOCATION

Hospital Ownership	Hospital Strategies							
	None	Increased Recruitment of Residents	Hiring More MDs for Staff	Reduction of Service	In-house Training of PAs and Ancillaries	Hiring of PAs and Ancillaries	Upgrading of Residency Training Programs	Other (Increase workload, apply for waiver, lower hiring standards, etc)
PRIVATE	0	11	4	3	3	9	3	9
Non-profit	(0)	(11)	(3)	(3)	(3)	(9)	(3)	(8)
For-profit	(0)	(0)	(1)	(0)	(0)	(0)	(0)	(1)
PUBLIC	1	4	3	3	2	5	0	4
City/County	(0)	(4)	(2)	(3)	(2)	(4)	(0)	(3)
State	(1)	(0)	(1)	(0)	(0)	(1)	(0)	(1)
TOTAL	1	15	7	6	5	14	3	13
AFFILIATED	0	15	6	5	5	13	3	10
Major	(0)	(9)	(4)	(5)	(4)	(9)	(3)	(3)
Limited	(0)	(4)	(0)	(0)	(1)	(2)	(0)	(4)
Graduate	(0)	(2)	(2)	(0)	(0)	(2)	(0)	(3)
NON-AFFILIATED	1	0	1	1	0	1	0	3
TOTAL	1	15	7	6	5	14	3	13
NORTHEAST	0	7	1	1	4	7	2	4
SOUTHEAST	1	2	1	0	0	1	1	1
SOUTH CENTRAL	0	2	2	1	0	2	0	2
NORTH CENTRAL	0	4	3	4	1	4	0	3
WEST	0	0	0	0	0	0	0	3
TOTAL	1	15	7	6	5	14	3	13

Exhibit [illegible] 26

HOSPITAL STRATEGIES, COST AND QUALITY OF CARE IMPLICATIONS

Strategy	Institutional Cost Implications	Quality of Care Impacts
Increased recruitment of residents	Slightly higher administrative costs.	Unknown
Hiring more MDs for staff	Direct staff costs will increase; secondary effects may include: costs for new equipment, support staff, and supplies.	Unknown.
Reduction of service	May create operational inefficiencies.	Potentially negative; a certain "critical mass" of procedures is required to ensure high quality care.
In-house training of PAs and ancillaries	Variable: depending upon the extent of training necessary.	For services provided quality of care likely will be high. However PAs and NPs do not provide the same set of services as residents.
Hiring of PAs, NPs, and ancillaries	Major: significantly higher than the cost of a resident.	For services provided quality of care likely will be high. However PAs and NPs do not provide the same set of services as residents.
Upgrading residency training programs	Potentially very costly, though this will clearly depend upon the extent of upgrading that is needed or desired. (e.g., purchase of new equipment)	Good potential to improve quality of care.
Hire "moonlighting" residents	Salaries of residents.	Unknown, but potential exists for breaks in continuity of care.

Strategy	Institutional Cost Implications	Quality of Care Impacts
Lowering staff hiring standards	Depending upon the need of a facility, salary for such personnel may be lower or higher than that of other staff.	Likely negative impact.
Increasing staff workload	No direct cost implications, although there may be some short-term cost efficiencies.	Potentially serious quality of care implications.
Applying for substantial disruption waivers	Minor administrative costs.	Unknown.
Rotating residents across hospitals	Administrative costs for coordinating program.	Unknown.
Sharing staff	Administrative costs for coordinating the program.	Unknown.
Raising staff salaries to attract MDs	Costly; a function of staff size.	Unknown.
Reduce the number of residency positions	If service provision is to be maintained, costs will rise as alternative means of providing care are generally more expensive.	Potentially negative, although if marginal programs are eliminated the results may enhance the quality of care.
Seeking medical school affiliation	Variable: dependent upon a number of factors, including: physical and philosophical proximity to a medical school, quality of hospital service leadership, hospital facilities, etc.	Potentially positive.

that there is an available pool of physicians willing to work in the hospital at the salary the hospital is willing to pay. This may not be the case. In fact, in those facilities most affected by the FMG reduction, general physician availability remains a problem. This problem is most severe for urban public hospitals and small community hospitals. Attracting quality physicians may necessitate paying a premium over the existing market price. As attending staff salaries are generally much greather than a resident's, the normal cost of replacing a resident with attending staff likely will be higher.[1]

The final option which is potentially most costly is the upgrading of residency training programs. The cost consequences of pursuing this strategy are highly variable. If a hospital already has an existing affiliated residency program, upgrading the program may simply mean finding a competent and dynamic individual to head the program. While the costs of such a search are not minimal, they are likely to be smaller than those that would be incurred by the hospitals seeking affiliation status for their residency programs. Depending upon its current situation and the physical and professional proximity of a medical school, the actions taken by a hospital to upgrade one of its residency programs might include: building a new physical plant[2], recruiting new leadership, providing better laboratory support, expanding in-house educational programs, establishing ties to other facilities, etc. The costs in administrative time alone, in establishing an affiliation arrangement, could be substantial.

The other options available to hospitals are relatively less costly than the aforementioned strategies, but they are

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[1] Although this may be offset by the higher productivity of an attending staff member.

[2] In most, if not all, states, facilities must obtain a Certificate of Need for any proposed replacement exceeding $150,000 in cost.

not costless. In an era when governmental concerns are focused upon containing hospital cost inflation, these lower cost options must be given serious attention. These strategies include: increasing staff workloads, rotating residents, sharing staff, increased recruitment of residents, hiring "moonlighting" residents, and applying for a substantial disruption waiver.

Pursuring a course of action such as increasing staff workloads or hiring moonlighting residents may be relatively inexpensive but it also may have adverse implications for the delivery of quality patient care. Increasing the staff workload may yield some short-term dividends in efficiency. However, the saturation point of increasing workloads is rapidly attained. Once this occurs, the average physician may find it difficult to give adequate attention to his/her caseload. One possible result is a reduction in the quality of patient care. The use of moonlighting residents to staff emergency rooms can augment hospital staffing patterns during needy intervals, but it is a stopgap measure, which fills a specific need. To expect these residents to assume the service delivery roles of unavailable FMG residents or attending staff is unrealistic. Residents employed in this manner have limited availability, and while the episodic quality of care may be high, the continuity of patient care is likely to be fragmented.

The rotation of residents across institutions and the sharing of attending staff are two ideas which are conceptually attractive. Many institutions throughout the country participate in programs of this type. However, there are common difficulties with both strategies. A certain amount of administrative adroitness is required to operate these programs. Agreement must be reached among all affected parties and staff support must be forthcoming. Still, strategies of this type do seem promising.

To the extent that a reduction in service reflects a reduction in demand, but not need for care, its effects on the

quality of care delivered and the health status of the population can be expected to be slight. If, however, service reduction occurs to the point where an adequate patient volume necessary to maintain staff skills is no longer possible, the quality of care implications are far different. In virtually all of the hospitals anticipating or experiencing service reductions as a consequence of the unavailability of FMGs, this service reduction was limited to a specific service. In general, basic hospital services will not be affected by the FMG-induced service reductions. There, of course, will be exceptions. One hospital anticipated a service reduction in surgery and in anesthesiology. Service reductions in these two specialties will have "ripple" effects throughout the hospital and the consequences may be witnessed in numerous ways, including: lower occupancy levels, lower volume of laboratory tests, underutilization of facilities and staff, and so forth.

Few hospitals in this sample sought to use the substantial disruption waiver process. Most viewed it as an administratively burdensome process that would only yield some short-term relief. The problem facing hospitals which have sought waivers is not necessarily one of retaining staff; rather it is a problem of attracting staff in the first place.

Implications of the Hospital Response to the Title VI Restrictions

Given the nature of the strategies employed by hospitals, it seems inevitable that some short-term disruptions in the delivery of certain hospital services will occur. In a subset of institutions, most notably those located in the Northeast and North Central portions of the country, the problems may prove to be comparatively more severe. For the majority of the hospitals in this sample, the reduction of FMGs constituted a problem which they could cope with. The wide range of short-term responses noted is testimony to the ability of hospitals to adapt and compensate for limited manpower.

The options facing hospitals that have been highly dependent upon FMGs do not appear to promise them relief from their problems. The transition from a state of heavy dependence (either the entire hospital or certain services), particularly resident staff, to one of only modest dependence appears to require a longer time frame than that provided by the Title VI provisions of P.L. 94-484. The transition period has apparently been too abrupt for some hospitals. The increases in the supply of U.S. medical school students are only now beginning to be witnessed in the residency training programs. The effects of the lag between the increase in the number of medical school students and their graduate training period are a partial explanation for the situation faced by many hard-hit hospitals.

There are other explanations. Some hospitals have allowed their residency programs to deteriorate and now use residents almost exclusively for the provision of services. Other hospitals are located in undesirable communities or have an aged and antiquated physical plant. These problems undermine the ability of the most seriously affected hospitals to attract and retain attending staff and residents. Perhaps the major effect of the FMG problem has been to identify the vulnerability of the affected hospitals to sudden changes in governmental policies. Policy recommendations regarding potential changes in the law that will address these concerns are discussed in the final chapter of this report.

Chapter 5

FINDINGS FROM ORGANIZATIONAL RESPONDENTS

FINDINGS FROM ORGANIZATIONAL RESPONDENTS

OVERVIEW

A second major component of the analysis consisted of an investigation of the positions and attitudes of professional medical organizations which have an interest in the FMG issue. The investigation included site visits to and interviews with representatives of all major groups. In addition, other organizations that were deemed to have indirect concern or interest were contacted by telephone to secure the same information.

Site visits to the following organizations were carried out:

- Association of American Medical Colleges (AAMC):
  This organization represents all medical schools in the United States.

- American Board of Medical Specialties (ABMS):
  Each specialty which requires board certification does so through the testing and screening procedures of its appointed board. In combination, all boards are represented for policy-making purposes by the ABMS.

- American Hospital Association (AHA):
  The AHA is the major trade representative of the more than 5,000 short-term general and other specialty hospitals in the United States.

- American Medical Association (AMA):
  Representing approximately fifty percent of American physicians, and a major policy initiating organization, the AMA is generally considered to be one of the most powerful components of organized medicine.

- Council of Medical Specialty Societies (CMSS):
  This organization represents the combined interests of all specialty societies in the United States.

- Educational Commission on Foreign Medical Graduates (ECFMG): The primary function of the ECFMG is to screen and test all FMGs who wish to enter graduate training programs in the United States. The ECFMG also administers the substantial disruption waiver process specified in Title VI.

- Joint Commission on Accreditation of Hospitals (JCAH): The Joint Commission was formed by the AMA and AHA for the purpose of evaluating and accrediting hospitals.

- New York City Health and Hospitals Corporation: This quasi-public corporation operates New York City's eleven public general hospitals.

The first five listed organizations comprise the Coordinating Council on Medical Education (CCME). Their interrelationship as members of the CCME will be discussed in a subsequent section.

In addition to the field interviews with the above-named organizations, telephone interviews were carried out with representatives of the following organizations:

- American Board of Pediatrics (ABP);
- American College of Surgeons (ACS);
- American Society of Anesthesiologists (ASA); and
- New York State Health Planning Commission.

Other specialty boards and societies were also contacted by telephone. These organizations declined to be interviewed, stating that they had not developed a policy position with respect to FMGs.

Discussions with the CCME members (AMA, AHA, ABMS, CMSS and AAMC) revealed general unanimity in their responses. In light of the original CCME report on FMGs, which was influential in the passage of P.L. 94-484, this was not surprising. All groups supported the philosophy and direction of the law, but expressed flexibility concerning specific details of the legislation. For example, there was general agreement that the mechanics of the waiver application process could be improved and there was little opposition to the consideration of extending the waiver application period. The most significant change that has the support of

these groups concerns the length-of-stay provisions for those FMGs who do enter the country: it is recommended that length-of-stay be allowed for the full duration of whatever residency program the student enters. Furthermore, up to one additional year should be allowed for shifting into a different program if the student elects to do so. This change in the language of Title VI is recommended in draft legislation being prepared by both the AMA and the International Communications Agency.

For the most part, the above organizations, as well as others that were interviewed, fully support the gradual reduction of the dependence upon FMGs. Some of the organizations (ABP, ECFMG, JCAH) view their roles as purely administrative. They do not concern themselves with policy recommendations at this time, focusing strictly on carrying out testing and screening procedures. It was determined from brief telephone conversations with various specialty boards that little policy advice can be expected from them.

Specific organizational recommendations and comments which emerged during the interviews are presented below. It is important to note that interviews were similarly structured, but not identical in content across organizations. Focus shifted according to the functions of specific groups; thus, the points which surfaced in them were not in response to specific and identical questions.

Because of the unique nature of the problems in New York, the findings obtained there are discussed in a separate section of this report (see Chapter 4).

Association of American Medical Colleges

The commitment of the AAMC to the goals and provisions of Title VI is demonstrated by the major role this organization played in the passage of P.L. 94-484. AAMC support is based upon two interrelated principles: first, that only qualified individuals should enter graduate medical education (residency) programs; and second, that only competent individuals should be responsible for

the provision of patient care. The AAMC's position is also based upon a concern over the "skill-drain" effects of past policies, as well as the degree to which highly specialized training of FMGs meets the medical care needs of foreign populations.

The AAMC supports the goals of Title VI, and would support administrative changes that are designed to facilitate more expeditious administration of the law. Although a formal organizational policy on the matter has not yet been developed, preliminary indications are that the AAMC would not object to the proposed amendments allowing VQE-qualified FMGs to complete residency programs and make a single specialty change. Other, more substantive alterations to Title VI (such as extending the substantial disruption waiver process to 1984), would not be supported.

AAMC representatives indicated an awareness of the short term difficulties imposed on many hospitals by Title VI. They felt, however, that these difficulties must be incurred at some point and that extending or weakening the existing provisions of Title VI would simply delay the inevitable.

American Medical Association

Prior to enactment of Title VI and the subsequent implementation of more stringent J-visa requirements, large number of FMGs entered the U.S. annually. The AMA generally supports the reversal of this trend through Title VI, and expects that the increased number of U.S. medical graduates and the training of VQE-qualified FMGs will, through a "filtering process," accommodate domestic health service needs.

Several modest changes in the Title VI provision likely would be supported by the AMA. These include the expansion of the current two-year length of stay provision, to allow for completion of residency programs, and an exclusion of H-visa holders from Title VI provisions. The AMA does not support changes in the law which exempt particular medical specialties from the Title VI restrictions for specified periods of time.

American Hospital Association

The goal of reducing, on a nationwide basis, the existing level of dependence on FMGs for the provision of medical care services is supported by the AHA. However, a number of concerns over the Title VI provisions were raised by AHA representatives. Special concern was expressed about the situation of public general hospitals and psychiatric facilities in selected areas. Both have traditionally relied upon FMGs for the provision of substantial amounts of patient care, due in large measure to their general inability to attract U.S. medical graduates.

The concerns expressed by AHA representatives reflected a desire to see the provisions of the law modified without altering the fundamental goals and intent of the legislation. According to the AHA representatives, an insufficient amount of time has elapsed to assess carefully the effects of the law on hospitals. Consideration should therefore be given to an expansion of the substantial disruption waiver process beyond December 31, 1980. In order to allow VQE-qualified and waiver-exempted FMGs to complete their program of training, the AHA supports an amendment to Title VI which would allow a length-of-stay equal to the length of time needed to complete a residency program, with limitations in the number of times a physician can change specialties.

One fundamental problem contributing to the FMG supply issue is the general maldistribution of all physicians by areas and specialty. Existing federal programs aimed at this problem (such as the National Health Service Corps) are believed appropriate, but of an insufficient magnitude to address the maldistribution problem effectively. A major component of any redistribution strategy, according to the AHA representatives, should be the inclusion of substantial local incentives (financial, professional, and other) designed to attract U.S. medical graduates to specialty and geographic shortage areas.

American Board of Medical Specialties

The ABMS policy with respect to foreign medical graduates was identified as consistent with that of the CCME. The organization "does not know" if there are short-run service disruptions resulting from the law, and posited that hospitals with FMG-dependence problems are actually facing other broader difficulties as well. The organization also noted that the primary goal of FMG residency training should be the education of the individual, consistent with the medical care needs of his/her home country. The fact that FMGs are primarily used for service provision in particular areas and within individual hospitals and services was considered inappropriate.

Several modest changes in the law were viewed as desirable. These included: allowing VQE-qualified FMGs to complete residency programs; allowing a single specialty change with the approval of the home government; and allowing special exemptions for particular residency programs of high quality which seek out gifted and excellent foreign medical graduates for special training.

Educational Commission for Foreign Medical Graduates

It should be noted at the outset that, being the organization responsible for the administration of the Visa Qualifying Exam (VQE) and the ECFMG Exam, the ECFMG views itself as a purely administrative, as opposed to a policy-making, entity. While some minor problems were noted in terms of the strong emphasis of the VQE in basic sciences, it was felt that this examination is an effective screening device for foreign applicants to the U.S. residency programs.

The ECFMG did indicate that an amendment to Title VI which would allow for the completion of residency programs by VQE-qualified FMGs (and ECFMG-qualified FMGs for whom the VQE requirement has been waived) with a single, first-year specialty change option, would be supported. It was felt that this change in the law would be sufficient to moderate much of the anticipated impact of Title VI on hospitals.

Council on Medical Specialty Societies

The CMSS supports the goals and the provisions of Title VI. The organization's only official position is that it supports the CCME policy report. While the CMSS is opposed to an extension of the substantial disruption waiver process, two amendments to the existing statutes are supported. These are: (1) an extension of the length of stay for VQE-qualified FMGs to allow for residency program completion, and (2) special treatment for distinguished physicians to allow these individuals to obtain specialized training for specified periods of time. Additional substantive alterations to the existing provisions of Title VI likely would not be supported by CMSS.

Joint Commission on the Accreditation of Hospitals

To the extent that improvement in the quality of medical care delivered in hospitals is the goal of Title VI, JCAH supports the intent and provisions of the law. While the organization did not make specific recommendations regarding Title VI, it did convey several relevant observations regarding both the causes of FMG dependence and the probable effects of Title VI on hospitals.

Regarding the dependence of some hospitals on FMG residents for service provision, the JCAH noted that FMG presence in residency training programs does not, in itself, imply a qualitatively weak program, though many of the programs may be of questionable educational quality. Moreover, in those hospitals where reliance upon FMGs is high, one could legitimately question whether the program exists for educational purposes or for service provision.

To offset the effects of Title VI, the JCAH identified several institutional strategies as favorable, including: seeking medical school affiliation; rotation of medical specialists through several hospitals (especially rural) to address problems of geographic and specialty maldistribution; and clinical service sharing between hospitals to offset potential shortages of appropriately-trained personnel.

The JCAH also identified questions it seeks to answer when evaluating hospitals with large numbers of FMGs. These include:

(1) Within individual institutions, are resident staff credentialing processes equivalent?

(2) Do hospitals adequately evaluate the backgrounds of applicant FMGs?

(3) Are temporarily-licensed FMGs inappropriately utilized in the hospital?

(4) Are all resident FMGs licensed for the provision of patient care?

American Society of Anesthesiologists

The American Society of Anesthesiologists has not adopted a formal policy with respect to Title VI. However, representatives of the group did indicate that they felt the fundamental goals of the law were "probably good." It is expected that Title VI will have significant nationwide impacts because 38 percent of all first-year anesthesiology residents are now FMGS.

The ASA representatives indicated that the predominant effect of Title VI would be to exacerbate an existing shortage in the specialty. They advocated ameliorative strategies, such as increased training of nurse anesthetists and training of anesthesia teams.

With respect to Title VI, ASA respondents indicated that the specialty likely would support an amendment allowing for the completion of residency programs by VQE-qualified FMGs. An extension of the substantial disruption waiver process to 1984 would not be advisable.

American College of Surgeons

The American College of Surgeons has expressed some concern over the effects of Title VI on the supply of surgeons in the U.S. Representatives of the group indicated that potentially serious "but temporary" shortages of qualified surgeons and surgical residents may take place in certain areas. The ACS also noted that the substitution of the Visa Qualifying Examination for the ECFMG

exam may not have been appropriate because the VQE is unfair, and, in part, too difficult. One of the consequences of this level of difficulty might be the shifting of graduate medical training sites of FMGs to countries other than the U.S.

The American College of Surgeons supports an amendment to Title VI which would allow VQE- (or otherwise) qualified FMG residents to complete training programs to the point of Board eligibility, allowing for a single specialty change by the end of the first postgraduate year.

American Board of Pediatrics

The American Board of Pediatrics, like all specialty boards, concerns itself almost exclusively with the certification of medical specialists. This organization does not act as a policy-making entity, and it thus confined its observations to the performance of FMGs on its examinations. The ABP indicated that FMGs have a significantly lower overall pass rate than do USMGs. FMGs typically take the examinations more than once, often after substantial additional training. The ABP also observed that the low pass rates are not solely the effect of language difficulties.

These findings, then, indicate a general concern on the part of the representatives of these organizations regarding the FMG supply constraints imposed by Title VI. Where modest policy differences do occur, they relate to: (1) the anticipated impact of the law on hospitals and on particular medical specialties; (2) the specifics (scope and timing) of implementation of the Title VI restrictions; and (3) the degree to which currently articulated policies will achieve their stated goals.

Chapter 6

POLICY RECOMMENDATIONS

POLICY RECOMMENDATIONS

INTRODUCTION

This study was intended as an exploratory investigation into the consequences of the responses to the Title VI provisions of P.L. 94-484. While possessing limited statistical power, the results of this study serve to identify the range of problems and strategies employed by hospitals. In the pages that follow, a series of recommendations are presented which are based upon information collected from the hospital and organizational respondents. These recommendations are divided into two categories: the first are those recommendations which could be implemented without any change in the law, while the second contain recommendations which would require legislative action. Virtually all recommendations in the first category could also be considered under the second.

Policy Recommendation #1:

The HRA should provide technical assistance (informational materials and consultation) to hospitals for the purpose of identifying and implementing FMG-reduction strategies.

Rationale:

The specific nature of the problems faced by hospitals in reducing their dependence upon FMGs varies considerably among facilities. In a more general sense, however, the nature of the problem and the range of effective FMG-reduction strategies do demonstrate a degree of consistency. The HRA, either directly or through a contractor(s), could provide technical assistance materials to hospitals to assist them in developing strategies, identifying appropriate fiscal and manpower resources, and the like. For those facilities with problems of a more specific nature, shared-cost, on-site consultation might enhance the probability of service continuity and help to maintain or enhance quality. As facilities begin to explore the nature of their FMG dependence and the various means by which their dependence can be reduced, a new body of hospital manpower planning information could be generated. Dissemination of this information and the development of technical assistance based upon these advances would greatly aid many hospitals in their efforts to comply with the law.

Implications:

The effects of this policy on hospital costs and quality of care would vary considerably depending on the nature and scope of the assistance provided, the resources available to implement the strategies developed, and the efficacy and overall quality of the technical assistance materials and consultation. Overall, it is reasonable to expect that the assistance provided would help facilities avoid costly and wasteful strategies of

RECOMMENDATIONS WITH NO CHANGE IN THE LAW

limited usefulness and would accelerate the individual institution's "learning curve" for decreasing its FMG dependence. This option is expected to modestly ease the administrative burden of participating facilities.

Providing technical assistance would again assist the HRA in directing hospital FMG reduction activities towards federal hospital manpower goals and objectives. The extent to which this policy change succeeds in redefining and redirecting these efforts depends largely on the nature of the assistance provided and the willingness of participating hospitals to make effective use of this expertise.

Policy Recommendation #2:

A special task force should be established, comprised of representatives of the Bureau of Health Manpower, the Bureau of Health Planning, the Bureau of Health Facilities Financing, Compliance and Conversion, and the Health Care Financing Administration. This work group should direct its attention to the effects of HRA and HCFA programs upon hospital functioning and the areawide configurations of institutional health services.

Rationale:

The policies and programs of the HRA's three Bureaus and the HCFA are often directed towards various aspects of hospital and health facility operations and financing. For example, the implementation of Title VI in some areas may result in medical manpower shortages and the possibility of service discontinuation. At the same time, the BHP and the BHFFCC have articulated policies designed to encourage service reduction, facility conversion, and mergers where feasible. HCFA's interest in containing hospital costs is also an appropriate concern in this area. Coordination among these agencies may lead to solutions consistent with various program objectives.

Implications:

It is likely that this strategy will have little or no effect on hospital costs in the short run. There may be, however, economies associated with minimizing overlapping and/or inconsistent policies which could, in the long run translate into moderate hospital cost reductions.

Establishment of a task force would also enhance the relative consistency of HRA and HCFA policies which directly or indirectly impact upon institutional health services. An inter-agency task force may be able to bring a global overview to the individual programs, while also responding to new and existing policies. Once established, the task force could play a role in developing long-range DHEW policy, program plans, and options.

Policy Recommendation #3:

Financial incentives should be provided to physicians in order to encourage them to locate in hospitals and geographic areas now dependent upon FMGs.

Rationale:

One of the factors which has led to FMG concentrations in certain hospitals has been the location of the institutions. Hospitals in smaller cities and the poorer sections of all cities are not considered desirable by American physicians. This problem is especially severe for urban general hospitals, psychiatric institutions, and small unaffiliated community hospitals. Although it is hoped that the increasing supply of USMGs will eventually filter into facilities in these areas, the filtering process, if it occurs, will be slow. During this adjustment period, service disruptions may occur in these locations. Financial incentives provided by the government, such as the National Health Service Corps, are directed at filling physician needs in underserved areas. Programs such as this should be expanded, and others created, in order to encourage and accelerate an orderly and efficient short-run filtering process.

Implications:

A policy such as this complements the overall intent of Title VI by encouraging a continual process that is expected to occur as a result of the law. Providing a physician supply to less desirable areas has been a government initiative for a number of years. This recommendation simply expands upon and further emphasizes that initiative.

Policy Recommendation #4:

There should be an expansion of the output of existing programs which train ancillary practitioners (such as physician assistants, nurse practitioners, and nurse anesthetists) who can provide some of the patient care and support activities currently performed by FMGs in residency programs.

Rationale:

Many of the strategies identified by hospitals to reduce dependence on foreign medical graduates involved some degree of task delegation and manpower substitution. A number of these options require hiring additional physician extenders (PEs) from an already limited supply. Current levels of physician assistant (PA) and nurse practitioner (NP) training are probably inadequate to meet these increased needs. Financial aid to existing PA and NP programs and to students in training, coupled with an information campaign to raise students' awareness of these opportunities, appear warranted. The results of this strategy (measured in terms of increased numbers of newly-trained PAs and NPs) are several years away.

Implications:

This policy would expand HRA's current commitment to train ancillary and support personnel. We expect no short-term hospital cost effects, though long-run costs may be high. In the long run, the increased availability of physician extenders and nurse practitioners will help to ensure that the care presently provided by FMG residents will continue to be provided. To be effective, continual monitoring of the PA/NP labor market must occur. This would ensure maximum compatibility with related health manpower programs, including those designed to increase the number of MDs graduated annually. Current projections of a possible physician surplus by 1990 and the impact of this surplus on the need and demand for PE services must also be considered.

Massive expansion of PE program output, while addressing manpower shortages in the near term, might create a potentially severe future surplus of PAs and NPs.

Policy Recommendation #5:

The HRA should conduct further research to determine the specific magnitude of the problems created for certain groups of hospitals (e.g., public general hospitals, long-term psychiatric institutions, and small community hospitals) and to identify the strategies employed to counter the problems generated by the Title VI restrictions on FMG supply.

Rationale:

Public general hospitals, long-term psychiatric hospitals, and small community hospitals are apparently experiencing more severe problems as a result of the Title VI restrictions than are most other types of facilities. These difficulties are largely the result of a traditionally high dependence on FMGs. This dependence, in turn, is the result of several factors including: location of the facility; constrained hospital resources; quality of the educational programs; poor physical plant and equipment; unexceptional case mix; and the like. These facilities, for all their problems, often serve medically needy populations whose utilization of the facility is frequently the last resort for emergency and primary medical care. Many of these hospitals face some form of residency program curtailment and/or service disruption as a result of the law. Additional research is needed to determine the extent of the problems in these facilities; to determine the range of strategies to address these concerns; to ascertain the existing level of resources needed to implement these strategies; and to identify specific types of technical assistance which can ease the burden on these hospitals.

Implications:

This recommendation, if implemented, would provide HRA with detailed information regarding the magnitude of the effects of the Title VI restrictions on the groups of hospitals most at risk of service disruptions and other problems. The information

generated by this endeavor would help to focus contemplated intervention efforts on the groups of hospitals with the greatest need and will assist HRA in planning for and evaluating future health manpower and hospital-related policies and programs.

RECOMMENDATIONS WITH A CHANGE IN THE LAW

Policy Recommendation #6:

Congress should amend Title VI to allow VQE-qualified FMGs to remain in the U.S. for an amount of time which is sufficient to complete a residency training program. Allowances should be made for one change in specialty if made by the end of the second post-graduate year.

Rationale:

The present two-year limit on length of stay for FMGs with J visas, and the one-year discretionary extension, does not allow sufficient time to complete most accredited residency training programs. This proposed policy change would allow incoming FMGs to enter and complete programs in all specialties, but would not affect the requirement that all FMGs return to their home country at the end of their program. The single specialty change (which would have to be made by the end of the FMG's second postgraduate year) will help to ensure that VQE-qualified FMGs are allowed to pursue the course of training most consistent with their interests and skills, as well as those of the country of origin.

Implications:

This proposed policy change would demonstrate the commitment of the U.S. to the specialty training of foreign physicians. It could conceivably result in larger numbers of residency program applications from VQE-qualified FMGs than would present policies, due to the more realistic length-of-stay provisions.

Policy Recommendation #7:

Congress should allow the existing substantial disruption waiver process to expire. It should develop a new and much more selective waiver process, designed to address specifically the problems of hospitals and areas which are heavily dependent on FMGs and in need of additional time to comply fully with the Title VI provisions. The new waiver process should be strictly limited to hospitals with long-standing problems. Hospitals applying for waivers should be required to demonstrate that the requested waivers are part of a viable manpower development plan which is designed to eliminate the need for continued dependence on FMGs. The waiver application extension should expire on December 31, 1983 with no further extensions permitted.

Rationale:

Virtually all facilities contacted in this study supported the fundamental concept reflected in the Title VI provisions. A number of hospitals located in inner-city areas with historically high FMG dependence indicated that the magnitude of their dependence precluded them from complying with Title VI on schedule. Constrained resources in many of these hospitals, and the length of the response time required to develop and implement effective FMG-reduction strategies could, in several situations, jeopardize the provision of patient care services. The population group most at risk from these probable service disruptions is the one most in need--the urban poor. An extension of the present substantial disruption waiver process is not recommended. Rather, the entire waiver policy should be carefully reviewed and more narrowly defined to accommodate only those cases where the need for prolonging the use of FMG staff is greatest and where a strong commitment exists to actively pursue various strategies for FMG reduction. The development of a waiver process consistent with this intent should effectively screen out inappropriate applications. Finally, the award of a waiver should be closely tied to each hospital's manpower development plan to

ensure that realistic goals and strategies have been considered by the facility and that adequate resources exist (and will continue to exist) to implement this plan.

Implications:

This recommendation represents a rather substantial change in the existing Title VI implementation strategy. It does not, however, substantially alter the fundamental goals or concepts of the law. By redefining the waiver process in a more rigorous manner, hospitals with significant staffing problems will be allowed more time to reduce their dependence upon FMGs. The requirement that the waiver application be part of a manpower development plan will also ensure that hospitals do, in fact, take positive action. Quality and continuity of care should remain relatively constant, while serious problems of potential service disruptions will be addressed. It is expected that the intended rigor of this process and its ties to individual hospital manpower development plans will add to the administrative burden of affected hospitals. This added burden, though, will result in more careful and thoughtful attention to both the causes of the FMG dependence problem and to effective goals and strategies.

Policy Recommendation #8:

Congress should maintain the existing exemption of visiting scholars from the provisions of Title VI. HRA should take appropriate steps to publicize this option.

Rationale:

Visiting medical scholars often come to U.S. hospitals and/or medical schools for limited periods of time during which they engage in very specific teaching, research or other educational activities. Most or all of these visa holders return to their country of origin to continue research or engage in the education of medical students. The continued exemption of visiting scholars from the Title VI restrictions would facilitate the international exchange of new medical information and techniques. Many hospitals, however, are unaware of this exemption. HRA should make every reasonable attempt to publicize this option in order to avoid disruptions of an important, ongoing international exchange of medical expertise. The regulations defining appropriate granting of visas should continue to be enforced in such a manner as to preclude attempts at circumvention.

Implications:

This provision of Title VI is consistent with the goal of restricting FMG supply because of the small number of individuals involved, the very short period of time usually spent in this country, and the focus of their activities on specialized research and educational matters. The potential international goodwill resulting from this policy should not be discounted.

APPENDIX

FOREIGN MEDICAL GRADUATES IN HOSPITALS:

A REVIEW OF THE LITERATURE

I. Introduction and Methodology

The passage of the Public Law 94-484, the National Health Professions Educational Assistance Act of 1976, dictated changes in the policies of the Immigration and Naturalization Service (INS) which will significantly reduce the number of visas issued to foreign medical graduates (FMGs) who are seeking to enter the United States as exchange visitors. Most FMGs enter this country for graduate medical training, and in that capacity serve as hospital residents and staff physicians. Over time, growth in the number of FMGs has exceeded that of American medical school graduates. FMGs now represent more than 20 percent of this country's practicing physicians. Their concentration in specific locations and specialties has led to an increasing dependency on them for service provision in hospitals.

Research is currently underway to determine the effects which the Title VI provisions of P.L. 94-484 (which place limits on FMG entry) have on hospitals, and what actions, if any, are being taken to offset these effects. An important and necessary first step in answering these research questions is a review of the literature on FMGs to obtain pertinent information and to ensure that all issues are considered.

Public Law 94-484 was passed on October 12, 1976. With a few minor exceptions, this report reviews literature pertaining to foreign medical graduates that has been published since May of 1975. At that time, the final report of an exhaustive review of the literature was published by Interstudy.[1] That report was released shortly after the publication of two other parallel studies on FMGs. Where appropriate, the findings of these reports will be cited in this review.

The focus of this review is limited. Specifically, it is designed to review the literature on the magnitude of the importance of Foreign Medical Graduates in American hospitals, and the implications for service delivery of a reduction in FMG supply.

A variety of sources were used to identify the literature found here. Our primary source was the bibliography on foreign medical graduates published by the National Technical Information Service,[2] covering the period 1975 through April 1979. All titles and abstracts in the bibliography were reviewed, and relevant titles were identified, located, and obtained. References and bibliographies within these articles were then searched in a similar manner. In addition, the indexing services of Boston-area libraries were employed and additional references were obtained through consultation with experts in the field.

Once the literature was obtained, the review process proceeded in an orderly fashion, encompassing the reading, editing, and abstraction of each article. To facilitate this process, an abstraction instrument was designed and a classification scheme was developed. Each work was stratified into one or more of the following categories: Supply-specific, meaning literature which dealt with specific specialties or geographic locations; Statistical work which provided data but no analysis; P.L. 94-484-specific literature; and Overview literature, which was more generalized or descriptive. Our objective in using a stratification scheme was to organize and code the work in a manner which would facilitate the review process.

In many cases, there was considerable overlap in the above categories. For example, an article dealing with a Supply-specific subject often included statistics supporting the author's contention. In a case such as this, the article was classified as Supply-specific, since the data were supportive in nature. In all cases, discretion was left to the judgment of the reviewer in determining what the intentions of the authors and the thrust of their products indicated.

It should be emphasized that the above schemes were not intended to segregate the articles, but to organize them. In preparing the review, which is narrative in design, we have combined schemes wherever a common theme was indicated or the inherent logic of the narrative called for it.

Our search indicated that there have been very few articles or studies completed that directly address the issue of hospital dependence on foreign medical graduates (FMGs). Although there are statistics which detail the proportions of staff and residency positions filled by FMGs, as well as data pertaining to particular specialties (such as surgery), we have found that these works tend to lack analytical content. Generally, the data are not disaggregated by SMSA, state, or urban/rural divisions. Statistics which focus on specialties do not address the question of the relative distribution of these individuals between geographic locations or practice modes. The literature reveals that there is a large proportion of FMGs in our total physician supply, that these physicians are concentrated in certain regions of the country, and that they tend to represent certain specialties in large proportions. These facts are then supported with highly aggregated data which are for the most part, collected by either the American Medical Association or the American Hospital Association.[3] We conclude that there has been a thorough macro analysis of the issue but very little micro analysis, probably because of the lack of disaggregated data which would be necessary to carry it out.

There are two notable exceptions to the lack of micro analysis. First, the New York State Health Planning Commission has completed a study which focuses on foreign medical graduates in New York City. This is undoubtedly the result of the exceptional dependence the state (and particularly New York City) has on the supply of FMGs. Second, several studies have concentrated on the role of FMGs in state mental institutions. Although these hospitals represent only a minor proportion of the total number

of institutions in the United States, and are not representative of them because of their long-term nature, a large proportion of their staff is comprised of FMGs. Psychiatry is one of the specialties in which there is a significant concentration of FMGs thus explaining this dependence. In addition, many FMGs who are unable to obtain full licensure seek employment in these institutions in nonphysician roles. Our review will include coverage of both the New York and state mental institution literature.

The remaining sections of this review have been organized in the following manner: those papers which deal specifically with P.L. 94-484 will be reviewed first; literature which bears directly on the provision of services by FMGs in hospitals--including the material concerning state mental hospitals--will then be discussed; and the concluding section will review work carried out on New York City.

II. Literature Directly Pertaining to P.L. 94-484

The passage of the National Health Professions Educational Assistance Act of 1976 represented a shift in emphasis by the federal government in its view of the issues surrounding the supply of health manpower in the United States. Prior to P.L. 94-484, major policy initiatives were embodied in the Comprehensive Health Manpower Training Act of 1971 (P.L. 92-157), reflecting the view that there was an aggregate shortage of physician manpower in the United States. Accordingly, the legislation focused on medical education institutions, providing incentives which would help to ensure their financial viability and increase the number of graduating physicians.[4]

The 1971 act expired on June 30, 1974, and initiatives directed at furthering federal action in the area of health manpower were developed. These initiatives (which ultimately led to the passage of P.L. 94-484 in 1976) were based in part on new issues raised in the early and mid 1970's and which are reflected in the professional literature of this period. The

concern with the supply of physicians became more focused, shifting the policy arena from an aggregate orientation to the geographic and specialty distribution of physicians. The structure rather than total number of physicians became the principal concern of decision-maker.

The basis for this shift in emphasis can be found in a number of sources. The number of medical school graduates in the United States had been growing substantially. Concurrently, physician-to-population ratios revealed a continuing and growing inter and intra state variation, particularly between urban and rural, and high and low income areas. Research also indicated that non-physician health personnel could be utilized as partial substitutes for physicians. In addition, the health care needs of the population, particularly primary care needs, did not match the specialty training characteristics of the physician supply. The combined effect of all these concerns ultimately led to many of the provisions of P.L. 94-484, one of which was Title VI. By limiting the influx of foreign medical graduates into the United States, the legislation represented a de facto statement by the Congress that this country would be able to meet its physician supply needs internally and that our dependence upon the supply of FMGs could be reduced.

The literature concerning FMGs that was published in the two-to-three year period preceding passage of P.L. 94-484 reflects the factors described above, as well as additional private sector concerns. These are summarized in a paper completed by Feldstein and Butter for the Sun Valley Forum on National Health.[5] They organized the FMG questions around four issues. The first concern is with the question of international equity, i.e., the flow of physicians from relatively poor countries to the United States. Feldstein and Butter point out that even though medical students enter this country as exchange students with the "paper intent" of eventually returning home, large numbers

obtain permanent visas and remain in the United States. A controversial result of this practice is that less developed countries, in effect, subsidize the United States by providing M.D.s whose educations are partially financed overseas.

The quality of medical care is raised as the second issue. FMG quality has been debated in the literature for many years. Feldstein and Butter identified options available on upgrading of FMG quality. These include: the elimination of residencies in unaffiliated hospitals; upgrading the quality of residency programs in general; improved testing and scoring of ECFMG exams; and the concept of limited licensure as a means of limiting the scope of practice FMGs.

A third issue addressed the fact that large numbers of American students are denied admittance to medical schools in the United States. Increases in domestic capacity as well as the encouragement of overseas medical school opportunities for Americans are cited as policy options.

The possibility of a domestic surplus of physicians represents the fourth issue, which is the most relevant in terms of the focus of P.L. 94-484. The authors cited the current belief that physician supply tends to generate demand which ultimately leads to increased and unnecessary medical expenditures. Given this possibility, they identified reductions in the number of visas issued to FMGs as a partial remedy. This correctly anticipated (if not influenced) the Title VI restrictions.

An alternative analysis of the growing concern over FMGs was presented by Stephen Mick,[6] who later expanded on his theme in a large scale study, the results of which were published in 1978.[7] He emphasized the growing number of FMGs in the United States, outlining their statistical profile in terms of their country of origin and distribution in the United States. Mick's emphasis, unlike that which we found in much of the literature, was supportive of the plight of the FMG. For example, in his analysis of the quality issue, he raised several points criticizing criteria which were used to evaluate physician competence.

Mick's primary theme was that the FMG "problem" was not a problem at all, but a symptom of more pressing problems in the American health care system. He argues that FMGs are here in large numbers because they usefully serve the purposes of the American medical care establishment. Specifically, their presence allows organized medicine to continue to limit the number of domestic school graduates. They are described by him as "...pawns... [who] fill in the most obvious cracks in the [American health care] system,"[8] i.e., they serve in the areas and in the roles that domestic physicians wish to avoid.

The tone of the Mick article was in response to the controversial nature of much of the literature of the period. An inevitable political initiative was developing, and much of the literature outlined recommendations concerning what the substance of the initiative should be. An editorial in the New England Journal of Medicine in June of 1974 called for resolution of the problems associated with the presence of large numbers of FMGs, and stated:

> A variety of organizations must participate in working through this most difficult problem. Most, if not all, are represented on the newly formed Coordinating Council for Medical Education (CCME). It seems appropriate that the major initial thrust might well stem from that source.[9]

A "major initial thrust" from the CCME did in fact occur. In June, 1976, CCME (which includes representatives from the American Board of Medical Specialties, American Hospital Association, American Medical Association, Association of American Medical Colleges, and the Council of Medical Specialty Societies) issued a report detailing the role of the foreign medical graduate as it related to the problem of physician manpower and distribution.[10] In addition to outlining the statistical importance of FMGs in this country, the report identified specific CCME recommendations for appropriate legislation. Holden[11] summarizes these by identifying eight principal recommendations: (1) stricter limitations on length of stay in the United States,

(2) requirements that FMGs have licenses to practice in an American jurisdiction, (3) rigorous assessment of verbal and written ability in English, (4) sponsorship by schools of medicine, (5) elimination of blanket certification on an occupational basis for visas, (6) uniform eligibility and qualification procedures for full licensure across all states, (7) additional support for the COTRANS program, and (8) identical entrance requirements into American graduate medical programs for USFMGs and FMGs.

Following passage of P.L. 94-484, analyses of its impact were carried out and reported. Given the lag which occurs between passage, implementation, and impact, much of the literature was speculative in nature. The political process which ultimately led to the law was summarized and reported by LeRoy and Lee in the form of a compilation of public hearing records and committee reports of the House and Senate Subcommittees on Health.[12] Many of the hearing witnesses quoted are researchers and physicians who are authors of the studies reported here.

Much of the work which immediately followed passage of the law emphasized the perceived severity of the restrictions. Rice focused on the length-of-stay limitations, noting the difficulties FMGs would have in undertaking subspecialty training, and suggests the need to redesign specialty programs in order to allow FMGs to complete them in two years.[13] Petty noted the "red tape" the law would create for new entrants, and expressed concern about the law's implication for FMGs already in the United States.[14]

Way, Jenson, and Goodman published the results of an analysis they carried out which was based on a survey sponsored by the American Medical Association and the American Hospital Association.[15] Questionnaires were mailed to 1,373 hospitals, and data were generated which identified the number of residency program positions filled by FMGs. Their findings confirmed FMG distributional characteristics that had previously been estab-

lished, and their surveys indicated that "between one-third and two-thirds of foreign graduates annually receiving visas will not qualify for admission under the new provisions."[16] They concluded that in areas where FMGs are concentrated, significant disruptions could occur in the first few years following implementation of the law, and they identified the substantial disruption waiver process as a critical element in avoiding disruptions in the delivery of medical services.

Statistical documentation of the issues which are addressed in most studies is generally based upon the data bases which are collected by either the American Medical or American Hospital Associations. Within the AMA, the Center for Health Services Research and Development periodically provides various summaries and papers which make use of the data and bear directly on FMGs.[17] Analytical work, such as the Way, Jenson, and Goodman study previously discussed, is usually published under the names of specific authors, while descriptive summaries of data are produced directly by the Center. One such summary, which utilizes data pertinent to the two-year period immediately following passage of P.L. 94-484, is The Role of Foreign Medical Graduates in U.S. Graduate Medical Education Programs, 1976-1978.[18] The report includes data which detail the percent of hospital residency positions filled by FMGs with J visas, stratified to reveal patterns across states, metropolitan areas, specialties, hospital ownership, and services. The purpose of the report was to "determine areas in which disruption of medical services might occur due to a reduced supply of FMGs [as a result of P.L. 94-484]."[19]

In the report, the historical areas of concentration by FMGs were, for the most part, confirmed. Middle-Atlantic, East-North Central, and South Atlantic states were identified as concentration areas, as were specific metropolitan areas within these regions. Physical Medicine, Radiology, Anesthesiology, Nuclear Medicine, and Child Psychiatry were cited as high FMG-concentrated specialties. The report was intended to be descriptive, and therefore did not contain material which recommended specific policies or was critical in nature.

III. Hospital Service and Supply-Specific Literature

There have been a number of relatively short articles published which address the FMG question in terms of particular states or specialties. These are, for the most part, descriptive as opposed to analytical. More elaborate work has been carried out in certain cases. For example, the role of FMGs in state mental institutions has been analyzed in greater detail because of their very high concentration of FMGs.

Soon after passage of P.L. 94-484, Egelston and Camp discussed the relationship between the specialty-distribution problems in this country and the anticipated decline in FMGs.[20] Using AHA data, they cited the 80 percent increase in USMGs that was occurring and projected to occur in the 1970s, and identified specific areas which may be impacted by a reduction in FMG availability in spite of this growth. They anticipated that there would not be severe problems in metropolitan areas, because domestic graduates would fill slots, but that inner city hospitals could be "severely hurt."[21] Because FMGs tend not to practice in rural areas, the authors saw little cause for concern about them.

More recent literature which focuses on hospitals in general cites the lack of domestic graduates to completely fill the void created by P.L. 94-484. Friedman concludes that there will be more positions than residents to fill them, and as a result hospitals will either have to reduce the size of their programs or seek to have more full-time staff.[22] Thus, either a cutback in services or an increase in costs will occur.

Bernard Weinstein has published an article which expresses concern over the near-term impacts of the law.[23] His article, which is one of the few that deals specifically with P.L. 94-484 as it relates to FMGs, reviews the terms of the provisions and describes AHA-recommended criteria for the granting of waivers. He also questions reports that FMG quality is lower than that of USMGs, stating that there is "no substantial evidence" that FMG quality is lower in the actual provision of services.[24]

He encourages flexibility in our immigration requirements, given that there will not be enough domestic graduates to fill hospital residency slots.

A short but very insightful essay by Hechel utilizes AMA data to analyze the effects on postgraduate medical education of P.L. 94-484.[25] He contrasted the "snowbelt" states against those in the "sunbelt," predicting that the Northeast will be most severely impacted, identifying seven Northeast and North-Central states which average 43 percent of their residency positions filled by FMGs. Particular concern was expressed by Hechel for his home state of New Jersey, in which over two-thirds of its residences (all specialties) are filled by FMGs. According to Hechel, New Jersey is an undesirable location to USMGs, and will therefore have more difficulties than will other states in the Northeast.

The problems which will be faced in New Jersey are also the subject of an article by Cohen, et. al.[26] Their report is particularly strong, because it goes beyond the straightforward reporting of statistics and proposes specific policy options which are available to alleviate the problem. They state that "the implementation of this law will disrupt graduate medical education in this state" and point out New Jersey's poor performance in attracting American graduates. They go on to state that one-half of the state's primary care residency positions are filled by FMGs, and that New Jersey's twelve unaffiliated primary care programs will all be "in jeopardy with the new law," and also that those affiliated programs with large proportions of FMGs may be forced to close unless they can attract greater numbers of American medical graduates. Furthermore, the state's problems will go "far beyond" the graduate education network.[27] It is anticipated that by 1982, the state will be in a situation where more M.D.s are leaving the work force than entering it. The authors go on to propose specific policy options, including: (1) promoting the use of physician's assistants; (2) encouraging

the employment of other health personnel; (3) changing the reimbursement mechanism to further promote the use of allied health personnel; (4) expansion in enrollment of medical students in the state; (5) increasing efforts to attract M.D.s to the state; (6) promoting health maintenance organizations; and (7) using peer review to constrain demand. All of these options are discussed by the authors. The analytical content of this article takes it beyond most others encountered in this review.

In terms of the impact of P.L. 94-484, an article by Wren, et. al.[28] which concerns the state of Georgia creates an interesting contrast with the above article. The authors surveyed thirty-one Georgia hospitals in order to measure the relative importance of FMGs in the state. They concluded from their analysis that "[i]t is obvious from this study...that the impact will be slight except on state hospitals."[29] There are seven state hospitals in Georgia, and there will be a serious effect on them, but in comparison to New Jersey, the overall impacts are apparently mild.

James Haug has written two articles which focus specifically on surgical residency positions.[30,31] The first was published in April of 1976, the second (which was an update) in June of 1978. In the first he used data from the AMA masterfile to compare FMG surgeon characteristics in 1970 and 1974. Data pertaining to major professional activity, specialty within surgery, and board certification were utilized, and he focused on the states of New York, Illinois, Ohio, New Jersey, Pennsylvania, Michigan, Maryland, California, Florida, and Massachusetts. He made several significant observations, three of which are relevant to P.L. 94-484. First, hospitals are "highly dependent on them." Second, he determined that two-thirds of all FMG surgeons are in general surgery or obstetrics and gynecology, and third, he stated that "critical shortages could develop if their numbers are reduced."[32]

Haug's first article pre-dated passage of P.L. 94-484. His second article was intended to measure the impacts of the law two years after it was passed. He was critical of the effects of the law's provisions, expressing concern over the emphasis of the provisions on primary care residencies. According to Haug, non-primary residencies were being reduced as a result of the law's requirements that specific percentages of first year residencies be in primary care. Haug, (who is Director of the Department of Surgical Practice, American College of Surgeons) believes that this emphasis is not cost effective and ignores the needs of the population.[33]

Patrick and Black have presented papers which focus on neurosurgical training.[34,35] P.L. 94-484 will affect neurosurgery in two ways: first, the removal of preferential status for FMGs will reduce the number of neurosurgeons in the United States, and second, the two-year limitation on visas will interfere with the training process, since neurosurgical residencies are longer than two or three years. The neurosurgical community regards the first effect as positive, since it believes that there is an oversupply of neurosurgeons in the U.S., and they regard the second effect as negative, since it will interfere with the training process for those FMGs who do enter the country. They conclude that training programs must be redesigned to accommodate the P.L. 94-484 provisions.

There has been a significant amount of work carried out concerning state mental hospitals (SMHs). As stated in our introduction, FMGs are highly concentrated in them, and this fact undoubtedly explains the quantity of research we have found. A 1976 article by Day, et. al.[36] specifically addresses P.L. 94-484 as it relates to these institutions. Their study focused on Michigan, involving interviews with Department of Mental Health personnel and chiefs of psychiatric departments in medical schools throughout the state. They also compared their data with similar data for the rest of the U.S. Using

their findings, they projected manpower needs in five-year intervals from 1977 to 2007, and concluded that USMGs will not be able to adequately replace the cohort of FMGs in Michigan. They stated that "the deficit created by the Title VI Provisions exceeds the capabilities of the other provisions to meet it."[37] They further estimate that the time needed to close this gap will be at least eight to ten years. The authors went on to make recommendations which included the development of new mental health manpower training methods, exploration of the option of using non-MD personnel, and the reduction in the number of patients in state hospitals by integrating them with other institutions at a community level.

Another paper which addressed the same issue was prepared by Knesper and published in 1978.[38] Utilizing a national telephone survey, Knesper contacted key Department of Mental Health personnel in order to determine: (1) the number and characteristics of state mental hospitals; (2) the percent of state mental hospital M.D.s who were FMGs, and (3) strategies that were being utilized to attract M.D.s to them. He found that states with hospitals with residency training programs employed significantly more psychiatrists and paid significantly lower salaries than states without them. The primary strategies being employed were: (1) competitive salary structures, (2) university affiliation, and (3) incorporation of hospitals into an interdependent network of delivery systems. He was not enthusiastic about the probable outcomes of these strategies, stating that "[a] shortage of psychiatrists continues to exist in state mental hospitals (SMHs), and Public Law 94-484 is likely to aggravate this problem."[39] This article confirms the pessimistic findings of the Day, et. al. paper previously discussed.

Other studies tend to confirm these findings. Levitt[40] identifies low salary levels and isolation from major facilities as a particular problem for SMHs, thus confirming the strategies identified by Knesper. A result of these negative characteristics

has been the heavy reliance SMHs now have on FMGs. This fact further confirms the contentions of Mick, cited earlier, that FMGs fill roles and serve in areas that domestic M.D.s wish to avoid.

A study completed by Windham, et. al.[41] further confirms the above findings. In a survey of forty states, he determined that even though FMGs constitute 20 percent of total U.S. physician manpower, they comprise 50 percent of physicians working in SMHs. Windham also examined how these facilities plan to compensate for the projected fall in FMGs. His response from unit directors in his survey indicated that they advocate the substitution of non-M.D. personnel, such as psychologists and social workers, as well as a reduction in the intensity of care, to alleviate the short-term reductions. Administrators were questioned about longer term plans, and they advocated the alteration of external factors, such as licensing and funding, which would make their institutions more attractive to USMGs.

In June 1978, an evaluation of the use of FMGs in SMHs was completed by Abt Associates, a private consulting firm, for the Department of Health, Education, and Welfare.[42] A major purpose of the study was to determine in what ways these hospitals may adjust to the Title VI provisions. The study was carried out by employing a statistical analysis of the demand for FMGs by these institutions. Specifically, this demand function was specified as being related to: (1) the function of the hospital; (2) the distribution of tasks among personnel within the hospital; (3) the costs of accomplishing these tasks (including FMG wages); (4) the characteristics of FMGs; and (5) the availability of alternative health personnel. Abt surveyed 40 SMHs in order to obtain quantitative data to be used in estimating the demand function. Making use of the elasticities implied by their statistical results, they attempted to measure the sensitivity of demand to changes in any of the above determinants.

Abt went on to utilize regression techniques in order to measure the impacts on various SMHs, stratified according to Abt's scheme, of reductions in FMG availability. The analysis provided details concerning: (1) the nature of SMHs; (2) physicians in SMHs; (3) staff allocations across hospital tasks; and (4) hospitals' short and long run responses to FMG losses.

The Abt findings confirmed many of the results obtained in the other studies reviewed above. Unit directors were found to respond to shortages by changing work shifts of remaining staff, changing to less physician intensive therapies, and by redelegating tasks. Abt's short run results were more optimistic than were those in other studies: hospitals would not experience changes in service provision in the short run because of the loss of FMGs. According to Abt, flexibility in the substitution of other labor inputs was sufficient to compensate for these losses.

IV. Literature Pertaining to New York City

The concentration of FMGs is greater in New York City than in any other city in the United States. According to the AMA, 38.5 percent of all residents in the city in 1978 where FMGs with J visas.[43] Two related points should be noted: the AMA figure pertains only to FMGs holding J visas, and it does not disaggregate the percentage to particular hospitals. If these points were taken into account, the aggregate would be much higher, and it would be extremely high for specific hospitals.

In 1979, the New York State Health Planning Commission prepared a report detailing a study which was carried out concerning FMGs in graduate medical education programs in New York City hospitals.[44] The report presented the results of an analysis of data collected in a 1979 survey of 50 hospitals in the city, updating a similar survey carried out in 1977. The data confirmed the concentrations of FMGs in particular types of hospitals and in certain specialties that have been noted in other parts of the country. It was determined that 38 percent of

house officers in the 50 hospitals where FMGs, and that there was significant variation in this percentage in the different boroughs in New York. Public and unaffiliated hospitals were most dependent on FMGs.

Some significant changes had occurred between 1977 and 1979. The percentage of first year residency positions held by FMGs declined from 41 percent to 34 percent, and there was a 60 percent drop in J visa holders in the same category. It was also determined that in all specialties, New York City hospitals were more dependent on FMGs than the average hospital nationally. The most serious problems were in pediatrics and internal medicine, where significant impacts upon hospital services, especially the delivery of ambulatory care to the poor, were being felt. Hospitals with greater than 75 percent of their positions filled by FMGs were in communities which were more than 50 percent minority, or which had greater than 40 percent of families earning income of $5,000 or less.

Perhaps most significant, the authors of the report did not express a sense of urgency concerning impacts of P.L. 94-484. They stated that "contrary to the apparent sense of 'crisis' in early 1977, the survey did not uncover extensive concern by hospital administrators and program directors."[45]

A doctoral dissertation which concerns the role of FMGs in New York City hospitals has been completed at the School of Public Health, Columbia University.[46] The study focused on nine hospitals, examining the potential impacts of P.L. 94-484 on them. In five of the nine cases investigated, the author found little or no problems being encountered, and in four others "some impact" was expected. The majority of hospitals have not opted to substitute attending staff or other personnel to fill slots, and did not express a desire to do so.

The Columbia study did find potential problems in certain areas (Queens and Brooklyn), and in particular specialties (anesthesiology and radiology). Hospitals appeared to be dealing

with these issues on a department-by-department basis, and it is the author's primary contention that the substitution of allied-health personnel in these areas would be the best solution for short-run difficulties that may develop.

V. Concluding Comments

As described in the introduction, the reviewed literature was stratified into four groups. The stratification process proved to be a convenient organizational device, and it will be used again here in summarizing the review findings. In addition, general impressions and a description of the implications for current research that can be drawn from the literature will be included.

In terms of specific P.L. 94-484 literature, there was considerable discussion of the issues surrounding FMG utilization which preceded passage of the Act. Much of the literature was prophetic, and the provisions of the Act tend to reflect many of the positions expressed. The most balanced views were those of Feldstein and Butter. Their paper was essentially an inventory of issues and possible solutions. As such, the authors did not endorse any particular legislative initiative, nor did they overly reflect the needs of a particular special interest group. Their paper included consideration of the implications of changes in domestic policy from an international perspective. Within the framework of the current research effort, this aspect is not directly relevant.

In contrast, the report of the Coordinating Council on Medical Education (CCME) expressed and endorsed a specific set of recommendations. The paper was intended to stimulate government action, and, as pointed out previously, much of the substance of the CCME report is reflected in the legislation. The importance of the report in terms of the current research effort lies in its depiction of the attitudes of important professional organizations toward the role of FMGs in the American health care system.

In reviewing the post P.L. 94-484 literature, one must carefully consider the sources from which particular products were generated. The effects of the law are apparently being witnessed in different ways throughout the health-care sector,

and those who are being negatively affected express concern in their writing. It is necessary to balance these concerns against the broader social issues when evaluating the work. The literature which was most valuable was that which concerned itself solely with statistical estimations of the magnitude of the impacts. The study by Way, Jenson, and Goodman is an excellent example. Their paper provided considerable insight into the projected impact of Title VI on the various types of visas that FMGs actually have. It alerts the reader to the possibility of a "cross over" reaction on the part of FMGs, i.e., the possibility that they will take advantage of other entry mechanisms. Thus, the author's prediction of a reduction of one-third to two-thirds of entering physicians is a rather wide range, implying that the overall impact may be less severe than some may anticipate. Individual hospitals may, in fact, report no significant impact because of the cross over mechanism.

The problem of "special interest" was particularly important when reviewing hospital service- and supply-specific literature. Individuals representing particular states or organizations focused their attention on narrower concerns. This is entirely appropriate, but from a reviewer's perspective, these concerns need to be balanced against those of others. For example, Haug's articles on surgical residencies clearly demonstrated his displeasure with the emphasis on primary care residencies. The required percentage of first-year residencies in primary care has created pressure which does not allow for the expansion of surgical residencies. In Haug's view, this is not in the public interest. One must contrast this view against the opinion of many individuals that there is an oversupply of surgeons in the United States and an undersupply of primary care physicians. In effect, Haug represents the interests of a particular group (the American College of Surgeons) that is negatively affected by the legislation. That is not to say that his expressed concerns should be entirely discounted, but only that they be properly balanced against the views of others. The neurosurgical

community, as represented by Black and Bernard, also will experience disruption in their residency training procedures. Their approach to the problem, however, appeared more constructive: they recommended redesigning the length of residency training to accommodate the two-year limitation imposed on J visa recipients.

Literature which focused on specific states and hospitals appeared well-balanced, especially in light of the aggregate statistics which supported the views expressed. New York and New Jersey appear to face significant problems, particularly in inner-city and poverty area locations. State mental hospitals are also being severely impacted. The lack of desirability of institutions in these localities makes it very difficult for them to attract USMGs.

New York State, and particularly New York City, appear to face relatively greater problems in accommodating a reduction in FMG availability. The literature implies that in certain parts of the city, potential hospital closures or departmental staff reductions could mean a cutback in service provision. However, the Commission report cited in this review does imply that hospitals are adjusting to these shortages, and that "extensive concern on the part of administrators" was not found. The tone of the study was essentially the same that we found in the dissertation completed at Columbia University.

The overall implications of the review are that there may be considerable short-run disruptions in discrete geographic and specialty areas. Specific geographic areas will tend to be in the northeast and North-Central states, particularly in inner city hospitals. A key variable which researchers should consider in identifying hospitals should be the relative desirability of a particular institution to American physicians. These communities, cities, and states which do not appeal to USMGs will have the most difficult time in finding alternative sources of physician personnel. At a more discrete level, specific departments and schedules within hospitals will be relatively more disrupted. For example, emergency room services in inner city hospitals

during the night hours are more prone to dependence on FMGs.

State mental institutions (SMIs) will also be more severely impacted, for the same reasons cited above. In the case of SMIs, regional location is less of a factor in identifying dependence, as these institutions are uniformly more dependent on FMGs.

It appears that the victims of these disruptions are likely to be the poor, the disadvantaged, and minorities, all of whom tend to be served by the types of institutions cited above. In addition, length-of-stay limitations imposed on FMGs who are able to receive J visas may require the redesign of graduate training programs, and in some cases (such as surgery) may lead to a reduction in the number of such programs.

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